STIC Search Report
EIC 2100

STIC Database Tracking Number: 114367

TO:	From:
Chongshan Chen Location: 4B25 Art Unit : 2172 Wednesday, February 18, 2004 Case Serial Number: 09/784352	Geoffrey St. Leger Location: EIC 2100 PK2-4B30 Phone: 308-7800 geoffrey.stleger@uspto.gov

Search Notes

Dear Examiner Chen,

Attached please find the results of your search request for application 09/784352. I searched Dialog's foreign patent files and technical databases.

Please let me know if you have any questions.

Regards,

Geoffrey St. Leger
4B30/308-7800

STIC EIC 2100 Search Request Form

58

114367

Today's Date: 2/11/04

What date would you like to use to limit the search?

Priority Date: 2/16/2000 Other:

Name Chongshan Chen

AU 2172 Examiner # 79547

Room # 4B25 Phone 305-8319

Serial # 09/784,352

Format for Search Results (Circle One):

PAPER DISK EMAIL

Where have you searched so far?

USP DWPI EPO JPO ACM IBM TDB

IEEE INSPEC SPI Other

Is this a "Fast & Focused" Search Request? (Circle One) YES NO

A "Fast & Focused" Search is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2100 and on the EIC2100 NPL Web Page at http://ptoweb/patents/stic/stic-tc2100.htm.

What is the topic, novelty, motivation, utility, or other specific details defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, definitions, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found.

A method of querying a plurality of database, comprising:

Submitting a query to plurality of database, the query containing information fields not contained in all of the database; and

Separately searching for the query at the plurality of database, each database using a reference logic at the database to infer a relationship between fields in the database and fields in the query not contained in the database,

Wherein each database infers the relationship in a decentralized fashion, without middleware,

Wherein a standard structure is described by standard descriptors, and a query structure and a database structure are described by the standard descriptors and/or more special descriptors, wherein the more special descriptors reference the standard descriptors via the reference logic, and

Wherein the special descriptors present in the query structure are compared with the special descriptors of the database, wherein identical special descriptors are evaluated for the query so that the reference logic provides a link between the query structure and the database structure via the standard structure.

STIC Searcher Geoffrey St. Leger Phone 308-7800

Date picked up 2/17/4 Date Completed 2/18/4

File 347:JAPIO Oct 1976-2003/Oct(Updated 040202)
(c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200411
(c) 2004 Thomson Derwent
File 348:EUROPEAN PATENTS 1978-2004/Feb W02
(c) 2004 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20040212,UT=20040205
(c) 2004 WIPO/Univentio

Set	Items	Description
S1	96	AU=HEUER J?
S2	2	S1 AND (QUERY??? OR QUERIE? ?) AND IC=G06F

2/5/1 **(Item 1 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

015060617 **Image available**
WPI Acc No: 2003-121133/200311
Related WPI Acc No: 2003-140882
XRPX Acc No: N03-096405
Method for searching elements/attributes rapidly or for filtering fragments rapidly in binary representations of structured XML documents encodes textual paths for indexing/ querying **these documents with improved filtering.**
Patent Assignee: SIEMENS AG (SIEI)
Inventor: **HEUER J** ; HUTTER A
Number of Countries: 022 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200301404	A2	20030103	WO 2002DE2308	A	20020625	200311	B

Priority Applications (No Type Date): DE 1011385 A 20020314; DE 1030525 A 20010625
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200301404	A2	G	12	G06F-017/30	

Designated States (National): CN JP US
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Abstract (Basic): WO 2003001404 A2
NOVELTY - Loss-free encoding can be achieved, in which, in addition to details of path type (PT), absolute type code (ATC) and relative path (RP), there are a number (NT) of types/child elements resulting from an absolute type (AT) or a scheme branching code (SBC). This number sets the number of nodes that can contain a set part path arising from a child element.
DETAILED DESCRIPTION - Specifying a scheme branching code can signalize defined child elements from which a part path emerges if a type declares several child elements with the absolute type code for the part path.
USE - In XML/SGML coding.
ADVANTAGE - All indices turn out identical even if a polymorphism is inserted. When storing these textual paths for indexing or **querying**, only one smaller volume of data has to be stored or transmitted. Consequently, the data can be compared more rapidly during a **query** since the volume of data to be compared is smaller.
DESCRIPTION OF DRAWING(S) - The drawing shows the structure of an encoded path, of an encoded part path marked with losses and a part path free of losses.
Absolute type (AT)
Absolute type code (ATC)
Number of types/child elements (NT)
Path type (PT)
Relative path (RP) (RP)
Scheme branching code (SBC)
pp; 12 DwgNo 1C/2
Title Terms: METHOD; SEARCH; ELEMENT; ATTRIBUTE; RAPID; FILTER; FRAGMENT; RAPID; BINARY; REPRESENT; STRUCTURE; DOCUMENT; ENCODE; TEXT; PATH; INDEX; DOCUMENT; IMPROVE; FILTER
Derwent Class: T01
International Patent Class (Main): **G06F-017/30**
File Segment: EPI

2/5/2 **(Item 1 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT

00971377 **Image available**

METHOD FOR RAPIDLY SEARCHING ELEMENTS OR ATTRIBUTES OR FOR RAPIDLY FILTERING FRAGMENTS IN BINARY REPRESENTATIONS OF STRUCTURED DOCUMENTS

PROCEDE PERMETTANT UNE RECHERCHE RAPIDE D'ELEMENTS OU D'ATTRIBUTS, OU UN FILTRAGE RAPIDE DE FRAGMENTS DANS DES REPRESENTATIONS BINAIRES DE DOCUMENTS STRUCTURES PAR EXEMPLE A BASE XML

VERFAHREN ZUM SCHNELLEN SUCHEN VON ELEMENTEN ODER ATTRIBUTEN ODER ZUR SCHNELLEN FILTERUNG VON FRAGMENTEN IN BINAREN REPRASENTATIONEN VON STRUKTURIERTEN DOKUMENTEN

Patent Applicant/Assignee:
SIEMENS AKTIENGESELLSCHAFT, Wittelsbacherplatz 2, 80333 Munchen, DE, DE (Residence), DE (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
HUTTER Andreas, Kesselbergstr. 14, 81539 Munchen, DE, DE (Residence), DE (Nationality), (Designated only for: US)
HEUER Jorg , Fischbachauerstrasse 8, 81539 Munchen, DE, DE (Residence), DE (Nationality), (Designated only for: US
Legal Representative:
SIEMENS AKTIENGESELLSCHAFT (commercial rep.), Postfach 22 16 34, 80506 Munchen, DE,

Patent and Priority Information (Country, Number, Date):
Patent: WO 200301404 A2-A3 20030103 (WO 0301404)
Application: WO 2002DE2308 20020625 (PCT/WO DE0202308)
Priority Application: DE 10130525 20010625; DE 10211385 20020314
Designated States: CN JP US
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
Main International Patent Class: **G06F-017/30**
Publication Language: German
Filing Language: German
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 1831

English Abstract
The invention relates to a method serves to encode textual paths for indexing and **querying** structured, for example, XML-based documents and serves to execute and improved filtering of binarily represented XML documents. A development of the method results in all indices being identical even in the event that a polymorphism is inserted therein. When storing these textual paths for indexing or **querying** , only one smaller volume of data has to be stored or transmitted. A comparison of this data can also subsequently ensure more rapidly during a **query** since the volume of data to be compared is smaller.

File 348:EUROPEAN PATENTS 1978-2004/Feb W02
(c) 2004 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20040212,UT=20040205
(c) 2004 WIPO/Univentio

Set	Items	Description
S1	136759	DATABASE? ? OR DATA()BASE? ? OR REPOSITOR??? OR INFORMATION()MANAGEMENT()SYSTEM? ?
S2	29548	QUERY OR QUERIES OR SEARCH(1W)(EXPRESSION? ? OR STATEMENT? ? OR PHRASE? ? OR STRING? ? OR PARAMETER? ? OR PLAN OR PLANS OR STRUCTURE? ?)
S3	2600	S2(5N)(STRUCTURE OR CONSTRUCTION OR ARRANGEMENT OR ORGANIZATION OR ORGANISATION OR FORMATION OR COMPOSITION OR CONFIGURATION OR SEMANTIC? ? OR TEMPLATE? ? OR MODEL? ? OR SYNTACTIC OR SYNTAX OR DESCRIPTOR? ? OR METADATA)
S4	560	S3(5N)(REFER??? OR REFERENC??? OR MAP???? OR CORRELAT? OR CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELAT??? OR RELATIONSHIP? ?)
S5	851072	COLUMN? ? OR FIELD? ?
S6	378117	S5(5N)(REFER??? OR REFERENC??? OR MAP???? OR CORRELAT? OR CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELAT??? OR RELATIONSHIP? ?)
S7	903	(GENERIC OR STANDARD OR GENERAL)(3W)S2
S8	35	S7(5N)(TRANSLAT? OR TRANSFORM? OR CONVERT??? OR CONVERSION? ? OR REFORMAT? OR RE()FORMAT? OR CHANG???)
S9	25	S1(100N)S8
S10	94	S7(5N)(REFER??? OR REFERENC??? OR MAP???? OR CORRELAT? OR CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELAT??? OR RELATIONSHIP? ?)
S11	51	S1(100N)S10
S12	42	S11 NOT S9
S13	162	FIELD? ?(5N)(MAP???? OR CORRELAT? OR CORRESPOND? OR ASSOCIAT? OR MATCH???)(5N)S2(5N)S1
S14	135	S13 AND IC=G06F
S15	22	S14/TI,AB,CM
S16	42	S2/TI,AB AND S14
S17	55	S15:S16
S18	137	S2(10N)IMPLICIT?
S19	54	S2(10N)IMPLICIT?(5N)(REFER??? OR REFERENC??? OR MAP???? OR CORRELAT? OR CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELAT??? OR RELATIONSHIP? ?)
S20	18	S1(100N)S19
S21	87	FIELD? ?(5N)IMPLICIT?(5N)(REFER??? OR REFERENC??? OR MAP???? OR CORRELAT? OR CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELAT??? OR RELATIONSHIP? ?)
S22	12	S1(100N)S21

9/3,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

01474706
Information retrieval system
System zum Wiederauffinden von Informationen
Systeme d'extraction d'informations
PATENT ASSIGNEE:
MICROSOFT CORPORATION, (749861), One Microsoft Way, Redmond, Washington 98052-6399, (US), (Applicant designated States: all)
INVENTOR:
Ferrel, Patrick J., 5240 21st St., N.E., Seattle, Washington 98105, (US)
Kerr, Randy, 10408 180th Ct., N.E., Redmond, Washington 98052, (US)
Uppala, Krishna, 5612 159th Pl., N.E., Redmond, Washington 98052, (US)
Bareddy, Krishna, 14550 N.E. 35th St., Apt. B102, Bellevue, Washington [illegible], (US)
LEGAL REPRESENTATIVE:
VOSSIUS & PARTNER (100314), Siebertstrasse 4, 81675 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1251438 A2 021023 (Basic)
APPLICATION (CC, No, Date): EP 2002014802 961115;
PRIORITY (CC, No, Date): US 560281 951117
DESIGNATED STATES: DE; FR; GB
RELATED PARENT NUMBER(S) - PN (AN):
EP 774722 (EP 96118399)
INTERNATIONAL PATENT CLASS: G06F-017/30
ABSTRACT WORD COUNT: 216
NOTE:
Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200243	268
SPEC A	(English)	200243	24394
Total word count - document A			24662
Total word count - document B			0
Total word count - documents A + B			24662

...SPECIFICATION the search criteria is executed.
The search object query is then sent to the search server 780 which provides one or more subqueries to the **database** server 276. The query is partitioned in a query partitioning function 1032 (Figure 21) based on the search criteria and sources. Each subquery is assigned to a worker thread 1026 as shown in Figure 21. The worker thread includes a **translation** function to **translate** a **general** form of the **query** into a server specific query. The server specific query is fed to the **database** server 276 by the worker thread.
The **database** server 276 uses the indexes of the query to access tables, such as a Property Keyword table 784 and a Document Detail table 786, stored in a number of **database** partitions 782. The **database** is segmented into partitions for efficiency. The **database** server 276 accesses the specific tables using the indexes provided in the query and returns search results in the form of content object GUIDs and...the tables shown. The Title/Section table 1030 and Section/Search Object ID table 768 are a part of the Container table in the catalog **database** 1002. The Title/Section table 1030 provides a list of all sections in the title and each section name is used to access the Section...

...in the query partitioning function 1032. Each subquery is assigned to a worker thread 1026 as shown in Figure 20.
The worker thread includes a **translation** function 1036 to **translate** a **general** form of the **query** into a server specific query. For instance, if the **database** server understands the SQL language then the user query, in a generalized form, is translated to SQL language. The server specific query is fed to the **database** server 276 by the worker thread 1026. The **database** server 276 accesses its specific tables using the indexes provided in the query and returns search results in the way

of story identifiers and properties...

9/3,K/3 **(Item 3 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS

01474705
Information retrieval system
System zum Wiederauffinden von Informationen
Systeme d'extraction d'informations
PATENT ASSIGNEE:
MICROSOFT CORPORATION, (749866), One Microsoft Way, Redmond, WA 98052, (US), (Applicant designated States: all)
INVENTOR:
Ferrel, Patrick J., 5240 21st St., N.E., Seattle, Washington 98105, (US)
Kerr, Randy, 10408 180th Ct., N.E., Redmond, Washington 98052, (US)
Uppala, Krishna, 5612 159th PI., N.E., Redmond, Washington 98052, (US)
Nareddy, Krishna, 14550 N.E. 35th St., Apt. B102, Bellevue, Washington 98007, (US)
LEGAL REPRESENTATIVE:
VOSSIUS & PARTNER (100314), Siebertstrasse 4, 81675 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1251437 A2 021023 (Basic)
APPLICATION (CC, No, Date): EP 2002014801 961115;
PRIORITY (CC, No, Date): US 560281 951117
DESIGNATED STATES: DE; FR; GB
RELATED PARENT NUMBER(S) - PN (AN):
EP 774722 (EP 96118399)
INTERNATIONAL PATENT CLASS: G06F-017/30
ABSTRACT WORD COUNT: 216
NOTE:
Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200243	596
SPEC A	(English)	200243	24361
Total word count - document A			24957
Total word count - document B			0
Total word count - documents A + B			24957

...SPECIFICATION the search criteria is executed.
The search object query is then sent to the search server 780 which provides one or more subqueries to the **database** server 276. The query is partitioned in a query partitioning function 1032 (Figure 21) based on the search criteria and sources. Each subquery is assigned to a worker thread 1026 as shown in Figure 21. The worker thread includes a **translation** function to **translate** a **general** form of the **query** into a server specific query. The server specific query is fed to the **database** server 276 by the worker thread.
The **database** server 276 uses the indexes of the query to access tables, such as a Property Keyword table 784 and a Document Detail table 796, stored in a number of **database** partitions 782. The **database** is segmented into partitions for efficiency. The **database** server 276 accesses the specific tables using the indexes provided in the query and returns search results in the form of content object GUIDs and...the tables shown. The Title/Section table 1030 and Section/Search Object ID table 768 are a part of the Container table in the catalog **database** 1002. The Title/Section table 1030 provides a list of all sections in the title and each section name is used to access the Section...

...in the query partitioning function 1032. Each subquery is assigned to a worker thread 1026 as shown in Figure 20.
The worker thread includes a **translation** function 1036 to **translate** a **general** form of the **query** into a server specific query. For instance, if the **database** server understands the SQL language then the user query, in a generalized form, is translated to SQL language. The

server specific query is fed to the **database** server 276 by the worker thread 1026. The **database** server 276 accesses its specific tables using the indexes provided in the query and returns search results in the way of story identifiers and properties...

9/3,K/4 **(Item 4 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS

01377112
Personal information security and exchange tool
Werkzeug zur Sicherheit und zum Austausch von personlichen Daten
Outil d'echange et de protection d'informations personelles
PATENT ASSIGNEE:
Cyva Research Corporation, (2478090), Suite 327, 3525 Del Mar Heights Road, San Diego, CA 92130, (US), (Applicant designated States: all)
INVENTOR:
O'Neil, Kevin, 3525 Del Mar Heights Road, Suite 327, CA 92130, (US)
Seidman, Glenn R., 830 West California Way, Woodside, CA 94062, (US)
LEGAL REPRESENTATIVE:
Viering, Jentschura & Partner (100645), Postfach 22 14 43, 80504 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1170926 A2 020109 (Basic)
APPLICATION (CC, No, Date): EP 2001122024 970722;
PRIORITY (CC, No, Date): US 22035 P 960722
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
RELATED PARENT NUMBER(S) - PN (AN):
EP 912954 (EP 97935175)
INTERNATIONAL PATENT CLASS: H04L-029/06; G06F-017/60; H04L-012/58
ABSTRACT WORD COUNT: 128
NOTE:
Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200202	1527
SPEC A	(English)	200202	28086
Total word count - document A			29613
Total word count - document B			0
Total word count - documents A + B			29613

...SPECIFICATION define the E-AutoPIA's request criteria and sends them through the virtual interpreter 81 and into the rules processor 79. The rules processor 79 **converts** the request into a **standard database** query request, such as a standard SQL SELECT command, and runs the query to request E-PIAs from the object **repository** 75. The E-Broker then processes each selected E-PIA's rules, sends then through the virtual interpreter 81, to the rules processor 79, and...

9/3,K/5 **(Item 5 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS

00966669
Database query system and method
Datenbanksuchsystem und -verfahren
Systeme et methode d'interrogation de bases de donnees
PATENT ASSIGNEE:
INTERNATIONAL BUSINESS MACHINES CORPORATION, (200123), , Armonk, NY 10504, (US), (Applicant designated States: all)
INVENTOR:
Carey, Michael J., 1473-Almaden Valley Drive, San Jose, California 95120, (US)
Kiernan, Gerald G., 1074 Wallace Drive, San Jose, California 95120, (US)

LEGAL REPRESENTATIVE:
  Davies, Simon Robert (75452), IBM, United Kingdom Limited, Intellectual Property Law, Hursley Park, Winchester, Hampshire SO21 2JN, (GB)
PATENT (CC, No, Kind, Date): EP 877328 A2 981111 (Basic)
EP 877328 A3 000119
APPLICATION (CC, No, Date): EP 98303616 980508;
PRIORITY (CC, No, Date): US 853294 970509; US 853976 970509
DESIGNATED STATES: DE; FR; GB
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: G06F-017/30
ABSTRACT WORD COUNT: 360
NOTE:
  Figure number on first page: 9B

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9846	1410
SPEC A	(English)	9846	17780
Total word count - document A			19190
Total word count - document B			0
Total word count - documents A + B			19190

...SPECIFICATION component 921 gets the views and the schema of the business objects, and information necessary to run methods from the CBS Data Manager and Metadata **Repository** 923 which contains the catalogs for the query engine. The query engine parses the query 905 and generates an internal representation of the query called...

...906. The OQGM 906 is passed to the query rewrite component 907. The query rewrite engine 907 applies transformations to the query. These query rewrite **transformations** 970 include the **standard** relational **query** rewrite techniques that were developed for relational systems and the query rewrite transformations for object building of the preferred embodiment of this invention.
  Query rewrite...

9/3,K/6 **(Item 6 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS
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Apparatus and method for maintaining integrated data consistency across multiple databases
Vorrichtung und Verfahren zur Aufrechterhaltung der integrierten Datenubereinstimmung zwischen mehreren Datenbanken
Appareil et methode pour maintenir la coherence de donnees integrees entre plusieurs bases de donnees
PATENT ASSIGNEE:
  AT&T Corp., (589370), 32 Avenue of the Americas, New York, NY 10013-2412, (US), (Applicant designated States: all)
INVENTOR:
  Kung, Fen-Chung, 215 Teneyck Road, Bridgewater, New Jersey 08807, (US)
LEGAL REPRESENTATIVE:
  Harding, Richard Patrick et al (41295), Marks & Clerk, Nash Court, Oxford Business Park South, Oxford OX4 2RU, (GB)
PATENT (CC, No, Kind, Date): EP 877323 A2 981111 (Basic)
EP 877323 A3 990811
APPLICATION (CC, No, Date): EP 98301698 980309;
PRIORITY (CC, No, Date): US 853579 970509
DESIGNATED STATES: DE; FR; GB
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: G06F-017/30
ABSTRACT WORD COUNT: 95
NOTE:
  Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9846	500
SPEC A	(English)	9846	3386
Total word count - document A			3886
Total word count - document B			0
Total word count - documents A + B			3886

...SPECIFICATION The registration data also contains predetermined or sample query descriptions that can be used by query manager to construct queries appropriate for each of subscribing **databases** 122, 124 and 126 (FIG. 1).

In step 312, query manager 202 (FIG. 2) generates a **database** query for each of **databases** 122, 124 and 126 (FIG. 2) in subscription system 104 (FIG. 1) based on the retrieved registration data. The **database** queries, for example, is constructed in the standard Structured Query Language ("SQL") designed for relational **database** .

Using the subscriber **database** information, query manager 202 (FIG. 2) performs query **translations** of a **general** **query** received from primary **database** engine 110 (FIG. 1) to a query that is recognizable by subscribing **databases** 122, 124 and 126 (FIG. 1). The format for translations is defined by subscriber engines 116, 118 and 120 (FIG. 1).

Synchronization manager 204 (FIG...

9/3,K/7 **(Item 7 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS

00836549
Information retrieval system
Informationswiederauffindungssystem
Systeme de recouvrement d'informations
PATENT ASSIGNEE:
MICROSOFT CORPORATION, (749861), One Microsoft Way, Redmond, Washington 98052-6399, (US), (Proprietor designated states: all)
INVENTOR:
Ferrel, Patrick J., 5240 21st St., N.E., Seattle, Washington 98105, (US)
Kerr, Randy, 10408 180th Ct., N.E., Redmond, Washington98052, (US)
Uppala, Krishna, 5612 159th Pl., N.E., Redmond, Washington 98052, (US)
Nareddy, Krishna, 14550 N.E. 35th St., Apt. B102, Belleuve, Washington 98007, (US)
LEGAL REPRESENTATIVE:
VOSSIUS & PARTNER (100311), Postfach 86 07 67, 81634 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 774722 A2 970521 (Basic)
EP 774722 A3 981202
EP 774722 B1 030122
APPLICATION (CC, No, Date): EP 96118399 961115;
PRIORITY (CC, No, Date): US 560281 951117
DESIGNATED STATES: DE; FR; GB
RELATED DIVISIONAL NUMBER(S) - PN (AN):
EP 1251437 (EP 2002014801)
EP 1251438 (EP 2002014802)
INTERNATIONAL PATENT CLASS: G06F-017/30
ABSTRACT WORD COUNT: 216
NOTE:
Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB97	1769
CLAIMS B	(English)	200304	1219
CLAIMS B	(German)	200304	1090
CLAIMS B	(French)	200304	1349
SPEC A	(English)	EPAB97	24381
SPEC B	(English)	200304	24342

Total word count - document A 26154
Total word count - document B 28000
Total word count - documents A + B 54154

...SPECIFICATION the search criteria is executed.

The search object query is then sent to the search server 780 which provides one or more subqueries to the **database** server 276. The query is partitioned in a query partitioning function 1032 (Figure 21) based on the search criteria and sources. Each subquery is assigned to a worker thread 1026 as shown in Figure 21. The worker thread includes a **translation** function to **translate** a **general** form of the **query** into a server specific query. The server specific query is fed to the **database** server 276 by the worker thread.

The **database** server 276 uses the indexes of the query to access tables, such as a Property Keyword table 784 and a Document Detail table 786, stored in a number of **database** partitions 782. The **database** is segmented into partitions for efficiency. The **database** server 276 accesses the specific tables using the indexes provided in the query and returns search results in the form of content object GUIDs and...the tables shown. The Title/Section table 1030 and Section/Search Object ID table 768 are a part of the Container table in the catalog **database** 1002. The Title/Section table 1030 provides a list of all sections in the title and each section name is used to access the Section...

...in the query partitioning function 1032. Each subquery is assigned to a worker thread 1026 as shown in Figure 20.

The worker thread includes a **translation** function 1036 to **translate** a **general** form of the **query** into a server specific query. For instance, if the **database** server understands the SQL language then the user query, in a generalized form, is translated to SQL language. The server specific query is fed to the **database** server 276 by the worker thread 1026. The **database** server 276 accesses its specific tables using the indexes provided in the query and returns search results in the way of story identifiers and properties...

...SPECIFICATION the search criteria is executed.

The search object query is then sent to the search server 780 which provides one or more subqueries to the **database** server 276. The query is partitioned in a query partitioning function 1032 (Figure 21) based on the search criteria and sources. Each subquery is assigned to a worker thread 1026 as shown in Figure 21. The worker thread includes a **translation** function to **translate** a **general** form of the **query** into a server specific query. The server specific query is fed to the **database** server 276 by the worker thread.

The **database** server 276 uses the indexes of the query to access tables, such as a Property Keyword table 784 and a Document Detail table 786, stored in a number of **database** partitions 782. The **database** is segmented into partitions for efficiency. The **database** server 276 accesses the specific tables using the indexes provided in the query and returns search results in the form of content object GUIDs and...the tables shown. The Title/Section table 1030 and Section/Search Object ID table 768 are a part of the Container table in the catalog **database** 1002. The Title/Section table 1030 provides a list of all sections in the title and each section name is used to access the Section...

...in the query partitioning function 1032. Each subquery is assigned to a worker thread 1026 as shown in Figure 20.

The worker thread includes a **translation** function 1036 to **translate** a **general** form of the **query** into a server specific query. For instance, if the **database** server understands the SQL language then the user query, in a generalized form, is translated to SQL language. The server specific query is fed to the **database** server 276 by the worker thread 1026. The **database** server 276 accesses its specific tables using the indexes provided in the query and returns search results in the way of story identifiers and properties...

9/3,K/8 (Item 8 from file: 348)

00811016

Information management apparatus providing efficient management of multimedia titles in a client-server network

Informationsverwaltungseinrichtung zum effizienten Verwalten von Multimedia-Titeln in einem Klient-Server-Netzwerk

Arrangement pour la gestion efficace de titres multimedia dans un reseau du type client-serveur

PATENT ASSIGNEE:
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Uenoyama, Tsutomu, 1-9-3, Tsuruma, Machida-shi, Tokyo, (JP)
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Kato, Masao, 1-26-2-101, Aizawa, Seya-ku, Yokohama, (JP)
Inagaki, Akira, 1-21-3, Kanda Suda-cho, Chiyoda-ku, Tokyo, (JP)
LEGAL REPRESENTATIVE:
Finsterwald, Martin, Dr. et al (75231), Manitz, Finsterwald & Partner GbR Martin-Greif-Strasse 1, 80336 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 753821 A1 970115 (Basic)
EP 753821 B1 020130
APPLICATION (CC, No, Date): EP 96111196 960711;
PRIORITY (CC, No, Date): JP 95174661 950711; JP 96121255 960516
DESIGNATED STATES: DE; FR; GB
RELATED DIVISIONAL NUMBER(S) - PN (AN):
EP 1054330 (EP 2000118011)
INTERNATIONAL PATENT CLASS: G06F-017/30
ABSTRACT WORD COUNT: 115
NOTE:
Figure number on first page: 13

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB97	2843
CLAIMS B	(English)	200205	978
CLAIMS B	(French)	200205	1220
SPEC A	(English)	EPAB97	19079
SPEC B	(English)	200205	17828
Total word count - document A			21926
Total word count - document B			20026
Total word count - documents A + B			41952

...SPECIFICATION respect to the title data storage means, and information for identifying the multimedia title.

In that case, the information management server may further comprise external **database** interface means coupled to transfer data between the title management information generating means and the external relational **database** , with the title management information generating means further comprising means controlled by the title registration means and the server control means for detecting any changes made in the title management information file which is stored in the title management information storage means, for generating data indicative of the **changes** in SQL (**Standard Query** Language) form, and supplying the data via the external **database** interface means to the external relational **database** , to be used to update portions of the external relational **database** which relate to the title management information.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a general system block diagram of a first embodiment of...

9/3,K/9 (Item 9 from file: 348)

00481764

Method for controlling the transfer of data between heterogeneous data base systems

Verfahren zur Steuerung der Ubertragung von Daten zwischen heterogenen Datenbanksystemen

Procede pour commander le transfert de donnees entre des systemes de base de donnees heterogenes

PATENT ASSIGNEE:
International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (Proprietor designated states: all)
INVENTOR:
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LEGAL REPRESENTATIVE:
Burt, Roger James, Dr. (52152), IBM United Kingdom Limited Intellectual Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)
PATENT (CC, No, Kind, Date): EP 449494 A2 911002 (Basic)
EP 449494 A3 930519
EP 449494 B1 990825
APPLICATION (CC, No, Date): EP 91302408 910320;
PRIORITY (CC, No, Date): US 500031 900327
DESIGNATED STATES: BE; CH; DE; DK; ES; FR; GB; IT; LI; NL; SE
INTERNATIONAL PATENT CLASS: G06F-017/30
ABSTRACT WORD COUNT: 121
NOTE:
Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9934	1052
CLAIMS B	(German)	9934	971
CLAIMS B	(French)	9934	1468
SPEC B	(English)	9934	9036
Total word count - document A			0
Total word count - document B			12527
Total word count - documents A + B			12527

...SPECIFICATION relational database management systems can be mutually understood and preserved, and data conversions minimised.

Currently there is great interest in joining together a plurality of **database** systems at different sites to form a distributed system which provides any user at any site with access to data stored at any other site; see for example, AN INTRODUCTION TO **DATABASE** SYSTEMS, Vol. 1, by C. J. Date (4th Edition, 1986), at pp. 587-622. Date envisions that each site would constitute an entire **database** system with its own **database** management system (DBMS), terminals, users, storage, and CPU.

Communications of the Association for Computing Machinery, vol.33, No.1, January 1990, pages 70-80, discloses sharing of data between heterogeneous distributed **databases** using a common data model and **translation** to a common **standard** **query** language, to overcome problems associated with data duplication and the cost of developing equivalent applications in different languages.

In a distributed **database** system such as the type described by Date, the DBMS at any site may operate on a machine type which is different than the machine...

...which operate on IBM System/370 machines, IBM AS/400 machines, and IBM PS/2 machines.

9/3,K/22 (Item 13 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00475562 **Image available**

METHOD AND SYSTEM FOR THE UPDATE OF REMOTE DATA USING PERSISTENT KEYS
PROCEDE ET SYSTEME DE MISE A JOUR DE DONNEES A DISTANCE AU MOYEN DE CLES PERMANENTES

Patent Applicant/Assignee:
ACXIOM CORPORATION,
Inventor(s):
MORGAN Charles D,
McLAUGHLIN G Leigh,
FOGATA Marvin G,
BAKER Joy L,
COOK Joy E,
MOONEY James E,
ROLAND David B,
TALBURT John R,

Patent and Priority Information (Country, Number, Date):
Patent: WO 9906914 A2 19990211
Application: WO 98US15066 19980721 (PCT/WO US9815066)
Priority Application: US 97902567 19970729
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 11743

Fulltext Availability:
Detailed Description

Detailed Description

... of data is required) or can request new data to be stored on customer database 210.

In a preferred embodiment of the invention, the customer **database** 21 0 is ODBC-compliant. ODBC ("Open Database Connectivity") is a database interface protocol developed by Microsoft Corporation that is now supported by
all major database product vendors. ODBC enables an ODBC-compliant application program to submit the same query to any ODBC-compliant database without regard to the particular **database** product on which the desired data is stored. This is important since every **database** product provider uses a different format for its **database** ; without ODBC, a different query would be required for each **database** product on the market. ODBC is implemented by a driver that " **translates** " SQL (**Standard Query** Language) data **queries** from the application software into requests that the queried **database** can process.

ODBC drivers are well known in the prior art and are available from several software publishers, including Simba Technology.

1 0 Central **database** 224 contains the master list of all data records from which new **databases** may be built or from which enhancement or update data may be requested. In a preferred embodiment, central **database** 224 comprises a series of physically remote **databases** communicatively linked together.

Central **database** manager 220 manages access to the various **databases** such 1 5 that central **database** 224 appears to be a single source of information. Thus central database 224 can be characterized as a "virtual" central database.

In a preferred embodiment...

9/3,K/23 **(Item 14 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT
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00413466 **Image available**
PERSONAL INFORMATION SECURITY AND EXCHANGE TOOL
OUTIL D'ECHANGE ET DE PROTECTION D'INFORMATIONS PERSONNELLES
Patent Applicant/Assignee:
CYVA RESEARCH CORPORATION,
Inventor(s):
O'NEIL Kevin,
SHIPMAN Glenn R,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9803927 A2 19980129
Application: WO 97US13309 19970722 (PCT/WO US9713309)
Priority Application: US 9622035 19960722
Designated States: DE IL JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 34694

Fulltext Availability:
Detailed Description
Claims
Detailed Description
... define the E-AutoPIA's request criteria and sends them through the virtual interpreter 81 and into the rules processor 79.

The rules processor 79 **converts** the request into a **standard database query** request, such as a standard SQL SELECT command, and runs the query to select E-PIAs from the object **repository** 75. The E-Broker then accesses each selected E-PIA's rules, sends then through the virtual interpreter 81, to the rules processor 79, and...

Claim
... agents further comprises:
computer-implemented means for said electronic broker to [illegible] request criteria from said electronic autonomous [illegible] information agent; and
means for **converting** said request criteria to a **standard database query** request.

16 The computer-networked system of claim 14 wherein said computer-implemented means for causing said transacting agent to extract a set of member...

9/3,K/24 **(Item 15 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT
(c) 2004 WIPO/Univentio. All rts. reserv.

00356281 **Image available**
SYSTEM FOR DISTRIBUTED TASK EXECUTION
SYSTEME POUR UNE EXECUTION REPARTIE DES TACHES
Patent Applicant/Assignee:
CORPORATION FOR NATIONAL RESEARCH INITIATIVES,
Inventor(s):
KAHN Robert E,
CERF Vinton G,
ELY David K,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9638795 A1 19961205
Application: WO 96US8017 19960530 (PCT/WO US9608017)
Priority Application: US 95453486 19950530
Designated States: AU CA CN JP MX AT BE CH DE DK ES FI FR GB GR IE IT LU MC

NL PT SE
Publication Language: English
Fulltext Word Count: 14045

Fulltext Availability:
Detailed Description
Detailed Description
... as a wing, could be done separately and then the
... interactions of the parts could be managed through
Knowbot programs*
In the case of **database** queries, a Knowbot program could operate by taking a request for information from a form filled out by the user and then, for each **database** to be searched,, converting the request with the aid of a specialized thesaurus in the service station, into the proper query format for that **database** .

Alternatively, each **database** could be associated with a service station having a standard Knowbot 10 interface capable of receiving and understanding standard Knowbot program requests for information. The Knowbot program need only **convert** user requests into the **standard** format before making **queries** of a **database** . Using a standard format helps in maintaining the quality and integrity of the information retrieval capability. It also enables a data carrier entity to do...

9/3,K/25 (Item 16 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2004 WIPO/Univentio. All rts. reserv.

00148303 **Image available**
ORGANIZATION OF THEORY BASED SYSTEMS
ORGANISATION DE SYSTEMES A BASE THEORIQUE
Patent Applicant/Assignee:
HEWLETT-PACKARD LIMITED,
BLACK Damian Sean,
MANLEY John Cyril,
Inventor(s):
BLACK Damian Sean,
MANLEY John Cyril,
Patent and Priority Information (Country, Number, Date):
Patent: WO 8805195 A1 19880714
Application: WO 88GB5 19880106 (PCT/WO GB8800005)
Priority Application: GB 87188 19870106
Designated States: AT BE CH DE FR GB IT JP LU NL SE US
Publication Language: English
Fulltext Word Count: 4801

Fulltext Availability:
Detailed Description
Detailed Description
... is
the empty theory.

In addition to the theories described so far, there are 35 theories which contain information not normally treated as data in **data base** system. One of these theories is the log theory 20, which contains the dynamic information about the development and usage of the system over time. Another is the query interface theory 21; this can **convert** a **standard** **database** **query** language into an appropriate form for querying any of the other theories in the system.

20/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

01295005
Method and apparatus for parallel execution of trigger actions
Methode und Gerat zur parallelen Ausfuhrung von auslosenden Aktionen
Methode et appareil pour l'execution parallele d'actions de declenchements
PATENT ASSIGNEE:
NCR INTERNATIONAL INC., (1449480), 1700 South Patterson Boulevard, Dayton, Ohio 45479, (US), (Applicant designated States: all)
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Nag, Biswadeep, 37271 Flin Common No. 3045, Freemont, CA 94536, (US)
Chen, Jian-Jun, 906 Eagle Heights, Apt. A, Madison, WI 53705, (US)
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PATENT (CC, No, Kind, Date): EP 1111516 A2 010627 (Basic)
EP 1111516 A3 030115
APPLICATION (CC, No, Date): EP 2000310551 001128;
PRIORITY (CC, No, Date): US 470227 991222
DESIGNATED STATES: DE; FR; GB
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: G06F-017/30
ABSTRACT WORD COUNT: 83
NOTE:
Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200126	417
SPEC A	(English)	200126	8609
Total word count - document A			9026
Total word count - document B			0
Total word count - documents A + B			9026

...SPECIFICATION second layer of country objects.
The client front end 108 also allows the user to **query** through a graphical interface; **implicitly** issuing spatial **queries** by zooming, clicking, or sketching a rubber-banded box on the 2-D **map** . The graphical capabilities of the client can be implemented using toolkits such as Tk/X11. Further, the user can query by explicitly composing ad-hoc queries in the **database** system's 100 extended SQL syntax.
The user can use the client front end 108...

...are displayed as ASCII strings. The front end 108 can also be used to update **database** objects. Object(s) to be updated can be selected either by pointing-and-clicking on...

20/3,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

01165202
Methods of refining descriptors
Verfahren zum Verfeinern von Deskriptoren
Methode d'affinage de descripteurs
PATENT ASSIGNEE:
Hewlett-Packard Company, A Delaware Corporation, (3016020), 3000 Hanover Street, Palo Alto, CA 94304, (US), (Proprietor designated states: all)
INVENTOR:
Riverieulx de Varax, Aymeric, 8 chemin J.B. Gilliard, 69300 Caluire, (FR)

Mroziewicz Michal, 69 Alma Road First Floor Flat, Bristol BS8 2DE, (GB)
Eshghi Kave, 321 North Clark Ave., Los Altos, CA 94022, (US)
Moreau Jean-Jacques, 91B Rue de Dinan, 35000 Rennes, (FR)
LEGAL REPRESENTATIVE:
Coker, David Graeme et al (29395), Hewlett-Packard Limited Intellectual Property Section Building 2 Filton Road, Stoke Gifford, Bristol BS34 8QZ, (GB)
PATENT (CC, No, Kind, Date): EP 938053 A1 990825 (Basic)
EP 938053 B1 030820
APPLICATION (CC, No, Date): EP 99301223 990219;
PRIORITY (CC, No, Date): EP 98301261 980220; GB 9825662 981125
DESIGNATED STATES: DE; FR; GB
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: G06F-017/30
ABSTRACT WORD COUNT: 85
NOTE:
Figure number on first page: 4

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	199934	372
CLAIMS B	(English)	200334	404
CLAIMS B	(German)	200334	405
CLAIMS B	(French)	200334	474
SPEC A	(English)	199934	4638
SPEC B	(English)	200334	4662
Total word count - document A			5011
Total word count - document B			5945
Total word count - documents A + B			10956

...SPECIFICATION under the control of the program in the memory 20, treats this choice as an **implicit** signal that an **association** has been made between the initial **query** (list of descriptors) and that item in the **database** . Consequently it updates the descriptors of the selected item accordingly in the store 22. All...

...SPECIFICATION under the control of the program in the memory 20, treats this choice as an **implicit** signal that an **association** has been made between the initial **query** (list of descriptors) and that item in the **database** . Consequently it updates the descriptors of the selected item accordingly in the store 22. All...

20/3,K/3 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00512958
Intelligent page store for concurrent and consistent access to a database by a transaction processor and a query processor.
Intelligenter Seitenspeicher fur gleichzeitigen und konsequenten Zugriff auf eine Datenbank durch einen Transaktions- und Such-Prozessor.
Memoire de page intelligente pour l'acces simultane et consistant a une base de donnees par un processeur de transaction et de recherche.
PATENT ASSIGNEE:
International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)
INVENTOR:
Dias, Daniel Manuel, 16 Pike Place, Mahopac, New York 10541, (US)
Goyal, Ambuj, Box 172, Noel Court, Amawalk, New York 10501, (US)
Parr, Francis Nicholas, 82 Teatown Road, RFD 1 No. 632, Croton-on-Hudson, New York 10520, (US)
LEGAL REPRESENTATIVE:
Schafer, Wolfgang, Dipl.-Ing. (62021), IBM Deutschland Informationssysteme GmbH Patentwesen und Urheberrecht, D-70548 Stuttgart, (DE)
PATENT (CC, No, Kind, Date): EP 501160 A2 920902 (Basic)

EP 501160 A3 930908
APPLICATION (CC, No, Date): EP 92101502 920130;
PRIORITY (CC, No, Date): US 660769 910225
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06F-015/403;
ABSTRACT WORD COUNT: 131

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	722
SPEC A	(English)	EPABF1	7102
Total word count - document A			7824
Total word count - document B			0
Total word count - documents A + B			7824

...SPECIFICATION been updated by a transaction since the query version was created by a process called **database** snapshot. We **refer** to this method of using shared physical pages to support independent transaction and **query** views as **implicit** versioning. The method is described in more detail using Figure 3 and Figure 4.
The...
...3, and Figure 4 includes an efficient scheme for determining when a copy of a **database** data page must be made to meet the requirement of presenting a consistent view to...

...transaction processing. This enables queries and transactions to execute concurrently without unnecessary replication of the **database** pages and hence at minimal cost.
The Non-Volatile Storage 12 in the Intelligent Page...

...implemented with any standard non-volatile medium (such as magnetic disks) for storing the Transaction **Database** Log 6, Transaction **Database** Data 8 and **Query** Version Data 14.
IMPLICIT VERSIONING: MANAGEMENT OF **QUERY** VERSIONS
Figure 3 is a state diagram defining **implicit** versioning by showing the **relationship** between **database** states, **query** snapshots, transactions and **queries** as time progresses. The diagram is not to scale in the sense in the sense...

20/3,K/4 (Item 4 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00483182
Apparatus and method for adding an associative query capability to a programming language
Verfahren und Gerat um eine inhaltsaddressierbare Abfragemoglichkeit einer Programmiersprache hinzuzufugen
Procede et dispositif pour ajouter la possibilite d'une interrogation associative a un langage de programmation
PATENT ASSIGNEE:
TEXAS INSTRUMENTS INCORPORATED, (279070), 13500 North Central Expressway, Dallas Texas 75265, (US), (applicant designated states: DE;FR;GB;IT;NL)
INVENTOR:
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Thompson, Craig W., 2725 Deep Valley Trail, Plano, Texas 75023, (US)
LEGAL REPRESENTATIVE:
Abbott, David John et al (27491), Abel & Imray 20 Red Lion Street, London WC1R 4PQ, (GB)
PATENT (CC, No, Kind, Date): EP 455447 A2 911106 (Basic)
EP 455447 A3 930630
EP 455447 B1 990616
APPLICATION (CC, No, Date): EP 91303851 910429;
PRIORITY (CC, No, Date): US 516369 900430
DESIGNATED STATES: DE; FR; GB; IT; NL
INTERNATIONAL PATENT CLASS: G06F-017/60;

ABSTRACT WORD COUNT: 148

LANGUAGE (Publication,Procedural,Application): English; English; English
CONTENT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9924	725
CLAIMS B	(German)	9924	648
CLAIMS B	(French)	9924	817
SPEC B	(English)	9924	8758
Total word count - document A			0
Total word count - document B			10948
Total word count - documents A + B			10948

...SPECIFICATION not one but many sets associatcd with them, as it is the case in all **database** systems which support implicit sets. This is achieved by allowing a programmer to explicitly define...

...the OQL(underscore)SET type (see Block 44 of Table 5, below) rather than assuming **implicit** sets of objects **associated** with the class definition.
OQL(C++) allows **queries** on transient and persistent sets. In relational DBMSs and in all current OODBMSs, queries are...

20/3,K/5 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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01068771 **Image available**
SEARCHING STRUCTURED, SEMI-STRUCTURED, AND UNSTRUCTURED CONTENT
APPAREIL ET PROCEDE DE RECHERCHE ET D'EXTRACTION DE CONTENUS STRUCTURE, SEMI-STRUCTURE ET NON STRUCTURE
Patent Applicant/Assignee:
VERITY INC, 894 Ross Drive, Sunnyvale, CA 94089, US, US (Residence), US (Nationality)
Inventor(s):
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SUBBAROYAN Ram, 4496 24th Street, San Francisco, CA 94114, US,
TOMAN Troy, 97 Wessex Way, San Carlos, CA 94070, US,
LAHIRI Rahul, 2947 Monte Cresta Drive, Belmont, CA 94002, US,
LOK Patrick, 310 N. Civic Drive, #303, Walnut Creek, CA 94596, US,
Legal Representative:
GALLIANI William S (et al) (agent), Cooley Godward LLP, 3000 El Camino Real, Five Palo Alto Square, Palo Alto, CA 94306-2155, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200398483 A1 20031127 (WO 0398483)
Application: WO 2003US15476 20030514 (PCT/WO US0315476)
Priority Application: US 2002380763 20020514
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 10868

Fulltext Availability:
Detailed Description

Detailed Description
... the document whose URI is "http://www.bn.com/book.catalog.xml", and returns the **matching** titles.

[00651 In the absence of an explicitly stated target document, the **query** is **implicitly** expanded into a **query** that targets all documents in the **repository** . For example, the
14
following **query** does not explicitly include the "document (" function.

FOR $b IN Ybook
RETURN $b/title
10066...

20/3,K/6 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00895504 **Image available**
AN IMPROVED SYSTEM FOR STORING AND RETRIEVING DATA
SYSTEME AMELIORE SERVANT A ENREGISTRER ET A EXTRAIRE DES DONNEES
Patent Applicant/Assignee:
POLAR EXTREME RESEARCH LIMITED, 4th floor, 111-113 Great Portland Street, London W1W 6QQ, GB, GB (Residence), GB (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
MATHER Andrew Harvey, 16 Clareville Court, Clareville Grove, London SW7 5AT, GB, GB (Residence), GB (Nationality), (Designated only for: US)
Legal Representative:
ABNETT Richard Charles (agent), Reddie & Grose, 16 Theobalds Road, London WC1X 8PL, GB,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200229627 A2-A3 20020411 (WO 0229627)
Application: WO 2001GB4437 20011005 (PCT/WO GB0104437)
Priority Application: GB 200024564 20001006
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 14994

Fulltext Availability:
Detailed Description

Detailed Description
... in more
detail and with reference to the drawings in which.

Figure 1 illustrates the **Repository** employed by the preferred system to
1 5 store data;
Figure 2 illustrates an example...

...query of the record set
of Figure 2;
Figure 3b schematically illustrates a second simple **query** of the record set of Figure 2;
Figure 3c illustrates an **implicit** **relationship** between the results shown
in Figures 3a and 3b;
Figure 4a schematically illustrates a **query** of the record set of Figure 2
specifying a condition shown as X;
Figure 4b...

20/3,K/7 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00865306 **Image available**
A SYSTEM FOR AUTOMATING A WEB BROWSER APPLICATION
SYSTEME PERMETTANT D'AUTOMATISER UNE APPLICATION DE NAVIGATEUR <I>WEB</I>
Patent Applicant/Assignee:
THE NATIONAL UNIVERSITY OF SINGAPORE, 10 Kent Ridge Crescent, Singapore 119260, SG, SG (Residence), SG (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
SIAK Chia Bin, Blk 32 Holland Close, #02-114, Singapore 270032, SG, SG (Residence), SG (Nationality), (Designated only for: US)
LIM Teck Sin, Blk 16 River Valley Close, #17-20 Pacific Mansion, Singapore 238433, SG, SG (Residence), SG (Nationality), (Designated only for: US)
Legal Representative:
ELLA CHEONG MIRANDAH & SPRUSONS PTE LTD (agent), Robinson Road Post Office, P.O. Box 1531, Singapore 903031, SG,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200198859 A2-A3 20011227 (WO 0198859)
Application: WO 2001SG129 20010622 (PCT/WO SG0100129)
Priority Application: SG 20003529 20000622
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 12591

Fulltext Availability:
Detailed Description

Detailed Description
... of the user for subsequent repetitive control and execution.

Also, the automating system includes a **repository** from which a set of queries and GUIs are generated. The inclusion of such a **repository** allows the input of domain **related queries** that not only facilitates the capturing of user intentions, but also acquires **implicit** and explicit knowledge that an organization may wish to trap from user. Furthermore, the automating...

...interfacing parts of the scripts which. are known as variables with data sources such as **databases** or ASCII data files. This allows the automating system to repetitively execute the scripits with...

20/3,K/8 (Item 4 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2004 WIPO/Univentio. All rts. reserv.

00826170 **Image available**
SYSTEM AND METHOD FOR PROVIDING INFORMATION BASED ON USER HISTORIES
SYSTEME ET PROCEDE PERMETTANT DE FOURNIR DES INFORMATIONS CIBLEES EN FONCTION DES INFORMATIONS IMPLICITES ET EXPLICITES PROVENANT D'HISTORIQUES UTILISATEURS
Patent Applicant/Assignee:
AETHER SYSTEMS INC, 11460 Cronridge Drive, Owings Mills, MD 21117, US, US (Residence), US (Nationality)
Inventor(s):

PAVENDA Anthony C, 11134 Stephalee Lane, Rockville, MD 20852, US,
Legal Representative:
RYAN John W (agent), Wilmer, Cutler & Pickering, 2445 M. Street, N.W., Washington, D.C. 20037-1420, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200169860 A2-A3 20010920 (WO 0169860)
Application: WO 2000US41058 20001004 (PCT/WO US0041058)
Priority Application: US 2000523169 20000310
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 12851

Fulltext Availability:
Detailed Description

Detailed Description
... or collects) the implicit information to include in history records 402a and 402b using internal **database** (s) I 1 6 and/or external **database** (s) 130. For example, such a **database** can store **implicit** information **related** to each stock symbol. Alternatively or additionally, server 114 can **query** **database** (s) 130 to acquire the **implicit** information **related** to explicit requests.

Server 114 can derive additional information from the explicit and implicit information...

20/3,K/9 (Item 5 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00784185 **Image available**
A SYSTEM AND METHOD FOR STREAM-BASED COMMUNICATION IN A COMMUNICATION SERVICES PATTERNS ENVIRONMENT
SYSTEME, PROCEDE ET ARTICLE DE PRODUCTION FOURNISSANT UN SYSTEME DE COMMUNICATION EN CONTINU DANS UN ENVIRONNEMENT DE CONFIGURATIONS DE SERVICES DE COMMUNICATION
Patent Applicant/Assignee:
ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)
Inventor(s):
BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918, US,
Legal Representative:
HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303-0746, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200117195 A2-A3 20010308 (WO 0117195)
Application: WO 2000US24125 20000831 (PCT/WO US0024125)
Priority Application: US 99386717 19990831
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English

Fulltext Word Count: 150532

20/3,K/10 (Item 6 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00784136
A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR BUSINESS LOGIC SERVICES PATTERNS IN A NETCENTRIC ENVIRONMENT
SYSTEME, PROCEDE ET ARTICLE DE FABRICATION POUR STRUCTURES DE SERVICES DE LOGIQUE DE COMMERCE DANS UN ENVIRONNEMENT S'ARTICULANT AUTOUR DE L'INTERNET
Patent Applicant/Assignee:
ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)
Inventor(s):
BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918, US,
Legal Representative:
HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly, LLP, 38th Floor, 2029 Century Park East, Los Angeles, CA 90067-3024, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200116728 A2-A3 20010308 (WO 0116728)
Application: WO 2000US24197 20000831 (PCT/WO US0024197)
Priority Application: US 99387658 19990831
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 150863

Fulltext Availability:
Detailed Description

Detailed Description
... value in accordance with
an embodiment of the present invention;
Figure 91 illustrates the problem **associated** with sending a NULL across many types of
middleware;
Figure 92 illustrates the manner in...

20/3,K/11 (Item 7 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00784132
A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A LEGACY WRAPPER IN A COMMUNICATION SERVICES PATTERNS ENVIRONMENT
SYSTEME, PROCEDE ET DISPOSITIF POUR MODULE D'HABILLAGE EXISTANT DANS UN ENVIRONNEMENT DE SCHEMAS DE SERVICES DE COMMUNICATION
Patent Applicant/Assignee:
ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)
Inventor(s):
BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918, US,
Legal Representative:
HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly, LLP, 1400 Page Mill Roadast, Palo Alto, CA 94304, US,

Patent and Priority Information (Country, Number, Date):
Patent: WO 200116724 A2-A3 20010308 (WO 0116724)
Application: WO 2000US24084 20000831 (PCT/WO US0024084)
Priority Application: US 99386834 19990831
Designated States: AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CU CZ DE DK DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 150947

20/3,K/12 (Item 8 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00784131
A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A MULTI-OBJECT FETCH COMPONENT IN AN INFORMATION SERVICES PATTERNS ENVIRONMENT
SYSTEME, PROCEDE ET ARTICLE MANUFACTURE POUR COMPOSANT DE RECUPERATION MULTI-OBJET DANS UN ENVIRONNEMENT CARACTERISE PAR DES SERVICES D'INFORMATIONS
Patent Applicant/Assignee:
ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)
Inventor(s):
BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918, US,
Legal Representative:
HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly LLP, Suite 3800, 2029 Century Park East, Los Angeles, CA 90067, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200116723 A2-A3 20010308 (WO 0116723)
Application: WO 2000US24083 20000831 (PCT/WO US0024083)
Priority Application: US 99386238 19990831
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 150940

20/3,K/13 (Item 9 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A REFRESHABLE PROXY POOL IN A COMMUNICATION ENVIRONMENT
SYSTEME, PROCEDE ET ARTICLE POUR GROUPE D'ELEMENTS MANDATAIRES (PROXY) RAFRAICHISSABLES DANS UN ENVIRONNEMENT A CONFIGURATIONS DE SERVICES DE COMMUNICATION
Patent Applicant/Assignee:
ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality)
Inventor(s):
BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918

, US,
Legal Representative:
HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly LLP, 1400 Page Mill Road, Palo Alto, CA 94304, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200116668 A2-A3 20010308 (WO 0116668)
Application: WO 2000US24113 20000831 (PCT/WO US0024113)
Priority Application: US 99386239 19990831
Designated States: AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 149976

Fulltext Availability:
Claims

Claim
... often:
have a pervasive impact on the overall development approach
require immature technology or tools
implicitly involve complex functional requirements
Component-based development is not only new technology; it is a...

20/3,K/14 (Item 10 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00772913 **Image available**
SYSTEM FOR MAINTAINING PRECOMPUTED VIEWS
SYSTEME DE CONSERVATION DE VUES PRECALCULEES
Patent Applicant/Assignee:
INFORMIX SOFTWARE INC, 4100 Bohannon Drive, Menlo Park, CA 94025, US, US (Residence), US (Nationality)
Inventor(s):
BUNGER Craig, 1484 27th Avenue, San Francisco, CA 94122, US
COLBY Latha S, 1385 San Domar Drive #1, Mountain View, CA 94043, US
COLE Richard L, 300 Johnson Avenue, Los Gatos, CA 95030, US
JOHNSON Galt, 65 Crestmont Drive, San Francisco, CA 94131, US
MCKENNA William J, 211 Elm Street, Santa Cruz, CA 95060, US
MULAGUND Gopal B, 4380 Albany Drive #21, San Jose, CA 95129, US
WILHITE David G Jr, 1543 Vista Club Circle #303, Santa Clara, CA 95054, US
Legal Representative:
EGAN William J, Fish & Richardson P.C., 2200 Sand Hill Road #100, Menlo Park, CA 94025, US
Patent and Priority Information (Country, Number, Date):
Patent: WO 200106419 A1 20010125 (WO 0106419)
Application: WO 2000US40438 20000719 (PCT/WO US0040438)
Priority Application: US 99356486 19990719
Designated States: AU BR CA JP MX
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Filing Language: English
Fulltext Word Count: 11362

Fulltext Availability:
Detailed Description

Detailed Description
... known to the query processing system, and those that should

be explicitly declared by the **database** administrator.

Hierarchies that follow the path of a primary key/foreign key **relationship** or result from non-nullable unique column definitions are **implicitly** known to the **query** processing system. As a result, a view grouped by, for example, the Sales.Perkey column...

20/3,K/15 **(Item 11 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT
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00519410 **Image available**
PROCESSING PRECOMPUTED VIEWS
TRAITEMENT DE VUES PRECALCULEES
Patent Applicant/Assignee:
INFORMIX SOFTWARE INC,
Inventor(s):
COLBY Latha S,
COLE Richard L,
HASLAM Edward P,
JAZAYERI Nasi,
JOHNSON Galt,
MCKENNA William J,
WILHITE David G Jr,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9950762 A1 19991007
Application: WO 99US6297 19990325 (PCT/WO US9906297)
Priority Application: US 9879679 19980327; US 9879671 19980327; US 9879670 19980327; US 9849784 19980327
Designated States: AU BR CA JP MX AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 14952

Fulltext Availability:
Detailed Description

Detailed Description
... known to the query
processing system, and those that must be explicitly declared by the **database** administrator.

1 5 Hierarchies that follow the path of a primary key/foreign key **relationship** or result from non-nullable unique column definitions are **implicitly** known to the **query** processing system. As a result, a view grouped by, for example, the Sales.Perkey column...

20/3,K/16 **(Item 12 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT
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00519380 **Image available**
SYSTEM AND METHOD FOR REWRITING RELATIONAL DATABASE QUERIES
SYSTEME ET PROCEDE DE REECRITURE D'INTERROGATIONS DE BASES DE DONNEES RELATIONNELLES
Patent Applicant/Assignee:
RED BRICK SYSTEMS INC,
Inventor(s):
COLBY Latha S,
COLE Richard L,
HASLAM Edward P,
JAZAYERI Nasi,
JOHNSON Galt,
MCKENNA William J,
SCHUMACHER Lee E,

WHITE David G Jr,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9950732 A2 19991007
Application: WO 99US6000 19990318 (PCT/WO US9906000)
Priority Application: US 9849784 19980327
Designated States: AU BR CA JP MX AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 15012

Fulltext Availability:
Detailed Description

Detailed Description
... capability relies on explicit functional dependencies provided by a user, and on functional dependencies known **implicitly** to the **query** rewrite system through primary key and foreign key **relationships** . A functional dependency is a many-to-one relationship shared by columns of values in **database** tables. A functional dependency from column x to column y is a constraint that requires...

...x column. A functional dependency may be explicitly declared by a user, such as the **database** administrator.

In this example, there is a rollup path from prod name to class name (assuming the user/ **data base** administrator had declared a functional dependency). The precomputed view can be used to rewrite the...

20/3,K/17 **(Item 13 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT
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00466814 **Image available**
KNOWLEDGE REPRESENTATION SYSTEM INCLUDING INTEGRATED KNOWLEDGE-BASE AND DATABASE, AND METHOD AND APPARATUS FOR UTILIZING THE SAME
SYSTEME DE REPRESENTATION DE CONNAISSANCES COMPRENANT UNE BASE DE DONNEES ET UNE BASE DE CONNAISANCES INTEGREES, ET PROCEDE ET APPAREIL D'UTILISATION DE CE SYSTEME
Patent Applicant/Assignee:
UNIVERSITY OF MARYLAND,
HENDLER James A,
STOFFEL Kilian,
TAYLOR Merwyn G,
Inventor(s):
HENDLER James A,
STOFFEL Kilian,
TAYLOR Merwyn G,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9857279 A1 19981217
Application: WO 98US11493 19980612 (PCT/WO US9811493)
Priority Application: US 9749623 19970613
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 9171

Fulltext Availability:
Detailed Description

Detailed Description
... inexpensive or typical single processor personal computer (PC).

Description of the Related Art.

Traditional relational **database** management systems (RDBMS) perform what is known as "explicit" data retrieval by explicitly matching data fields in a query or search request with data fields stored in the **database** . At the time of the creation of the **database** , or entry of data into the **database** , data is entered in a particular field. For example, a medical **database** may contain fields for "patient name", "patient address", "date-of-birth", "sex", etc.
More complex systems are referred to as knowledge bases or knowledge representation systems, instead of **databases** . Knowledge bases can utilize what are known as **implicit** **relationships** between seemingly
unrelated or distantly **related** elements in order to provide **query** results based upon this **implicit** knowledge, rather than by merely **matching** explicit data fields or **relationships** . Such implicit search capabilities have often used what is known as a semantic network system ...

20/3,K/18 **(Item 14 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT

00286811
METHOD AND APPARATUS FOR MANAGING RELATIONAL DATA IN AN OBJECT CACHE
PROCEDE ET DISPOSITIF PERMETTANT DE GERER DES DONNEES RELATIONNELLES DANS UNE ANTEMEMOIRE D'OBJETS
Patent Applicant/Assignee:
PERSISTENCE SOFTWARE INC,
Inventor(s):
JENSEN Richard H,
HENNINGER Derek P,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9504960 A2 19950216
Application: WO 94US8585 19940729 (PCT/WO US9408585)
Priority Application: US 93101385 19930802
Designated States: CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Fulltext Word Count: 12506

Fulltext Availability:
Detailed Description

Detailed Description
... at any given time, even if several different queries return the same information from the **database** . Third, the mechanism guarantees the integrity of data in the cache by locking data appropriately in the structured **database** during a **database** transaction, flushing cache data at the end of each transaction, and transparently re-reading the...

...technique of key swizzling according to the invention converts foreign key information from the structured **database** into pointers in the object cache, thereby improving the performance of object-oriented applications that access the cache. In key swizzling, information requests from an object-oriented application are **mapped** into queries to the structured **database** , and the results of those **queries** are converted into object instances in the object cache. More particularly, **implicit** primary and foreign key **references** from the structured **database** are converted into explicit pointers between object instances contained in the object cache.

```
File 347:JAPIO Oct 1976-2003/Oct(Updated 040202)
         (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200411
         (c) 2004  Thomson Derwent

Set     Items   Description
S1     133974   DATABASE? ? OR DATA()BASE? ? OR REPOSITOR??? OR INFORMATIO-
             N()MANAGEMENT()SYSTEM? ?
S2       7565   QUERY OR QUERIES OR SEARCH(1W)(EXPRESSION? ? OR STATEMENT?
             ? OR PHRASE? ? OR STRING? ? OR PARAMETER? ? OR PLAN OR PLANS -
             OR STRUCTURE? ?)
S3        469   S2(5N)(STRUCTURE OR CONSTRUCTION OR ARRANGEMENT OR ORGANIZ-
             ATION OR ORGANISATION OR FORMATION OR COMPOSITION OR CONFIGUR-
             ATION OR SEMANTIC? ? OR TEMPLATE? ? OR MODEL? ? OR SYNTACTIC -
             OR SYNTAX OR DESCRIPTOR? ? OR METADATA)
S4         87   S3(5N)(REFER??? OR REFERENC??? OR MAP???? OR CORRELAT? OR -
             CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELAT??? OR RELATIONS-
             HIP? ?)
S5     748096   COLUMN? ? OR FIELD? ?
S6      30677   S5(5N)(REFER??? OR REFERENC??? OR MAP???? OR CORRELAT? OR -
             CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELAT??? OR RELATIONS-
             HIP? ?)
S7         49   S1 AND S4
S8         46   S7 AND IC=G06F
S9        109   S2(5N)(GENERIC OR STANDARD OR GENERAL)
S10        79   S1 AND S9
S11        12   S10 AND (S3 OR S6)
S12         8   S9(5N)(REFER??? OR REFERENC??? OR MAP???? OR CORRELAT? OR -
             CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELAT??? OR RELATIONS-
             HIP? ?)
S13         7   S9(5N)(TRANSLAT? OR TRANSFORM? OR CONVERT??? OR CONVERSION?
             ? OR REFORMAT? OR RE()FORMAT? OR CHANG???)
S14         6   S13 NOT (S8 OR S11:S12)
S15       168   S2(7N)S5
S16      1571   S1(7N)S5
S17        44   S15 AND S16
S18        43   S17 NOT (S8 OR S11:S12 OR S14)
S19        31   S3(5N)(TRANSLAT? OR TRANSFORM? OR CONVERT??? OR CONVERSION?
             ? OR REFORMAT? OR RE()FORMAT? OR CHANG???)
S20        16   S1 AND S19
S21        14   S20 NOT (S8 OR S11:S12 OR S14 OR S18)
S22        14   (POLICY OR RULE? ?)(5N)(TRANSLAT? OR TRANSFORM? OR CONVERT-
             ??? OR CONVERSION? ? OR REFORMAT? OR RE()FORMAT? OR CHANG???)-
             (5N)S2
S23        13   S22 NOT (S8 OR S11:S12 OR S14 OR S18 OR S21)
```

8/5/22 (Item 22 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014037951 **Image available**
WPI Acc No: 2001-522164/200157
XRPX Acc No: N01-386995

Managing information in an information system having a server, a client and database for computers, telecommunications and computer network systems, particularly over a network

Patent Assignee: SABA SOFTWARE INC (SABA-N); LIPKIN D S (LIPK-I)
Inventor: LIPKIN D S; HELGESON C S; LARSON R S; PANUGANTI S
Number of Countries: 094 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200152118	A2	20010719	WO 2001US920	A	20010112	200157	B
AU 200129371	A	20010724	AU 200129371	A	20010112	200166	
US 20020073080	A1	20020613	US 2000176137	P	20000114	200243	
			US 2001760432	A	20010112		
US 6643652	B2	20031104	US 2000176137	P	20000114	200374	
			US 2001759678	A	20010112		

Priority Applications (No Type Date): US 2000176137 P 20000114; US 2001760432 A 20010112; US 2001759678 A 20010112
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200152118	A2	E	233	G06F-017/30	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200129371	A	G06F-017/30	Based on patent WO 200152118	
US 20020073080	A1	G06F-007/00	Provisional application US 2000176137	
US 6643652	B2	G06F-017/30	Provisional application US 2000176137	

Abstract (Basic): WO 200152118 A2

NOVELTY - Method entails generating metadata using an import agent, determining at least one match using a match agent, and dispatching the result associated with the match using a delivery agent. The metadata may be RDF metadata, or the **match** agent may use an RQL **query** . A **match template** may be used in the information resource system having at least two sets of metadata; or an import agent, match agent and metadata **repository** .

DETAILED DESCRIPTION - AN INDEPENDENT CLAIM is made for:
(a) An article of manufacture; and
(b) A computer program product for use with the information resource system.

USE - For computers, telecommunications, and computer network systems, particularly for efficiently managing and retrieving information over a network.

ADVANTAGE - Enables searching for information and discovering information, such as web resources, in a more flexible and sophisticated manner. Invention also facilitates finding information associated with RDF on the World-Wide Web.

DESCRIPTION OF DRAWING(S) - Drawing shows a typical configuration of Internet connected systems representative of preferred embodiment of the present invention.

pp; 233 DwgNo 1/17

Title Terms: MANAGE; INFORMATION; INFORMATION; SYSTEM; SERVE; CLIENT; **DATABASE** ; COMPUTER; TELECOMMUNICATION; COMPUTER; NETWORK; SYSTEM; NETWORK
Derwent Class: T01
International Patent Class (Main): **G06F-007/00** ; **G06F-017/30**
File Segment: EPI

8/5/23 (Item 23 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013956085 **Image available**
WPI Acc No: 2001-440299/200147
XRPX Acc No: N01-325614
Records classifying method in database , involves selecting set of records by ranking records in which each of the record of selected set satisfies selection criteria
Patent Assignee: EXCHANGE APPL INC (EXCH-N)
Inventor: THEARLING K
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6240411	B1	20010529	US 9897875	A	19980615	200147	B

Priority Applications (No Type Date): US 9897875 A 19980615
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6240411	B1		22	G06F-017/30	

Abstract (Basic): US 6240411 B1
NOVELTY - The method involves providing model for ascertaining characteristic of individual records. Selection criteria such as **query** including **reference** to the **model** is formed. The first model is executed using the reference to generate a value for characteristic of one of several records. The selected set of records is selected by ranking the records in which each of the record satisfies the selection criteria.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(a) Campaign management system;
(b) Method of selecting records;
(c) Method of resolving selection criteria;
(d) Method of forming selection criteria;
(e) Method of using campaign management system
USE - For records classification in **database** for commercial application.
ADVANTAGE - The records are classified by selecting a set of records by ranking the records in which each record of the selected set satisfies a selection criteria having a query, thereby the difficulty in coordinating and combining use of more than one model within a campaign management program, is reduced and effectiveness is improved.
DESCRIPTION OF DRAWING(S) - The figure shows the performance of campaign management having model for use in generating field of the **database** .
pp; 22 DwgNo 6/12
Title Terms: RECORD; CLASSIFY; METHOD; **DATABASE** ; SELECT; SET; RECORD; RANK; RECORD; RECORD; SELECT; SET; SATISFY; SELECT; CRITERIA
Derwent Class: T01
International Patent Class (Main): **G06F-017/30**
File Segment: EPI

8/5/24 (Item 24 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

013896622 **Image available**
WPI Acc No: 2001-380835/200140
XRPX Acc No: N01-279248
Managing database system of computer involves transmitting query to server computer from client computer associated with data structure and receiving subset of data satisfying query
Patent Assignee: DOERING M (DOER-I); PARLEWICZ P (PARL-I); QUERYOBJECT SYSTEMS CORP (QUER-N)

Inventor: DOERING M; PARLEWICZ P
Number of Countries: 091 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200108050	A1	20010201	WO 2000US19110	A	20000713	200140	B
AU 200062122	A	20010213	AU 200062122	A	20000713	200140	

Priority Applications (No Type Date): US 99358636 A 19990721
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200108050	A1	E	26	G06F-017/30	

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200062122	A		G06F-017/30	Based on patent WO 200108050

Abstract (Basic): WO 200108050 A1

NOVELTY - The method involves sending a **query associated** with a data **structure** from a client computer (2) to a server computer (6). The data structure includes multiple data arranged in predetermined dimensional relationship with other data in the structure. The client computer receives a subset of data structure with at least one data satisfying the query.

USE - For managing **database** system of computers connected to internet.

ADVANTAGE - Allows data to be manipulated and transmitted in a compressed format and allows querying of at least two data subsets efficiently from single data source without rebuilding an index for combination of subsets.

DESCRIPTION OF DRAWING(S) - The figure shows the explanatory drawing illustrating the management of **database** system.

Client computer (2)
Server computer (6)
pp; 26 DwgNo 1/4

Title Terms: MANAGE; **DATABASE** ; SYSTEM; COMPUTER; TRANSMIT; QUERY; SERVE; COMPUTER; CLIENT; COMPUTER; ASSOCIATE; DATA; STRUCTURE; RECEIVE; SUBSET; DATA; SATISFY; QUERY
Derwent Class: T01
International Patent Class (Main): **G06F-017/30**
File Segment: EPI

8/5/25 **(Item 25 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
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013831268 **Image available**
WPI Acc No: 2001-315480/200133
Related WPI Acc No: 2000-578367; 2002-146801
XRPX Acc No: N01-226722

Interested consumer number determining method in database **event system, involves using search data containing different path levels corresponding to attribute**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: ASTLEY M C; CHANDRA T D; STROM R E; STURMAN D C
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6216132	B1	20010410	US 97975280	A	19971120	200133	B

Priority Applications (No Type Date): US 97975280 A 19971120
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6216132	B1		20	G06F-017/00	

Abstract (Basic): US 6216132 B1

NOVELTY - **Search** data **structure** contains path levels **corresponding** to attributes so that **search** data **structure** determines number of consumers interested in receiving event. One of the attribute is don't core value which indicates traversal of path to proceed irrespective of whether another path is followed, so that when another path is followed, **search** data **structure** contains spatially parallel **search structure** .

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) Event publishing method;

(b) Program storage device with interested consumer number;

(c) Interested consumer number determining program;

(d) Interested consumer number determining system

USE - In **database** event system and publish/subscribe system for determining number of consumers interested in an delivered event.

ADVANTAGE - Provides capability for matching filters to events based on general search data structure. Enables number of optimization and provides better performance than other matching techniques. The data structure enables the construction of publish/subscriber system which allows consumers to specify a filter in its subscription rather than a group identifier.

DESCRIPTION OF DRAWING(S) - The figure shows example of search graph built for determining number of interested consumers in an event.

pp; 20 DwgNo 4/8

Title Terms: CONSUME; NUMBER; DETERMINE; METHOD; **DATABASE** ; EVENT; SYSTEM; SEARCH; DATA; CONTAIN; PATH; LEVEL; CORRESPOND; ATTRIBUTE

Derwent Class: T01

International Patent Class (Main): **G06F-017/00**

International Patent Class (Additional): **G06F-015/16**

File Segment: EPI

8/5/26 (Item 26 from file: 350)

DIALOG(R)File 350:Derwent WPIX

013673762 **Image available**

WPI Acc No: 2001-157974/200116

Related WPI Acc No: 1999-561263; 2000-104484; 2000-205137; 2000-223379; 2001-388690; 2003-446760

XRPX Acc No: N01-114988

Query processing for distributed object system, by generating data structure with identifier of object, and preset attribute requested by query even if identifier is not requested as specific attribute in query

Patent Assignee: ELECTRONICS DATA SYSTEMS CORP (ELDA-N)

Inventor: CUMMINS F A; SADIQ W; SWIFT W E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6134545	A	20001017	US 9765400	P	19971113	200116	B
			US 9816558	A	19980130		

Priority Applications (No Type Date): US 9765400 P 19971113; US 9816558 A 19980130

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6134545	A		6	G06F-017/30	Provisional application US 9765400

Abstract (Basic): US 6134545 A

NOVELTY - A query requesting specific attribute of selected object satisfying query criteria is sent to a **database** (46) with state data of objects. A **database** interface (44) generates a data structure (50) based on query results, the data structure with object identifier and preset attribute requested is generated based on query, even if identifier is not requested as specific attribute in the query.

DETAILED DESCRIPTION - An iterator (48) access the data **structure**

in response to the **query** and generates object **reference** with respect to the object identifier. The object implementation associated with the object reference is not activated until the object reference is used to attempt invoking of a method of that implementation. INDEPENDENT CLAIMS are also included for the following:
(a) query processing system;
(b) iterator
USE - For distributed object system such as computerized card catalog system for library.
ADVANTAGE - Since objects associated with query results are activated only when needed, efficiency of the distributed object system is improved.
DESCRIPTION OF DRAWING(S) - The figure shows the explanatory drawing of the distributed object system.
Database interface (44)
Database (46)
Iterator (48)
Data structure (50)
pp; 6 DwgNo 2/2

Title Terms: QUERY; PROCESS; DISTRIBUTE; OBJECT; SYSTEM; GENERATE; DATA; STRUCTURE; IDENTIFY; OBJECT; PRESET; ATTRIBUTE; REQUEST; QUERY; EVEN; IDENTIFY; REQUEST; SPECIFIC; ATTRIBUTE; QUERY
Derwent Class: T01
International Patent Class (Main): **G06F-017/30**
File Segment: EPI

8/5/27 (Item 27 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013515434 **Image available**
WPI Acc No: 2000-687380/200067
XRAM Acc No: C00-209268
XRPX Acc No: N00-508163

Data structure for representing polymers, specifically nucleic acids, polypeptides or especially polysaccharides, providing form of notation giving rapid searching results, e.g. related to sequencing

Patent Assignee: MASSACHUSETTS INST TECHNOLOGY (MASI)
Inventor: KEISER N; RAMAN R; SASISEKHARAN R; SHRIVER Z; VENKATARAMAN G
Number of Countries: 022 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200065521	A2	20001102	WO 2000US10990	A	20000424	200067 B
EP 1190364	A2	20020327	EP 2000923599	A	20000424	200229
			WO 2000US10990	A	20000424	
JP 2002543222	W	20021217	JP 2000614193	A	20000424	200312
			WO 2000US10990	A	20000424	
US 6597996	B1	20030722	US 99130747	P	19990423	200354
			US 99130792	P	19990423	
			US 99159939	P	19991014	
			US 99159940	P	19991014	
			US 2000558137	A	20000424	
US 20030191587	A1	20031009	US 99130747	P	19990423	200367
			US 99130792	P	19990423	
			US 99159939	P	19991014	
			US 99159940	P	19991014	
			US 2000558137	A	20000424	
			US 2003356349	A	20030131	

Priority Applications (No Type Date): US 99159940 P 19991014; US 99130747 P 19990423; US 99130792 P 19990423; US 99159939 P 19991014; US 2000558137 A 20000424; US 2003356349 A 20030131
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200065521	A2	E	105	G06F-019/00	

Designated States (National): CA JP
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU

MC NL PT SE
EP 1190364 A2 E G06F-019/00 Based on patent WO 200065521
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
JP 2002543222 W 130 C08G-085/00 Based on patent WO 200065521
US 6597996 B1 G06F-019/00 Provisional application US 99130747
Provisional application US 99130792
Provisional application US 99159939
Provisional application US 99159940
US 20030191587 A1 G06F-019/00 Provisional application US 99130747
Provisional application US 99130792
Provisional application US 99159939
Provisional application US 99159940
Div ex application US 2000558137
Div ex patent US 6597996

Abstract (Basic): WO 200065521 A2

NOVELTY - A data structure, in a computer-readable medium, representing a polymer of chemical units, comprising an identifier including fields, each storing a value corresponding to properties of the polymer,is new. At least one field stores a non-character-based value.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a computer-implemented method for generating a data structure, in a computer-readable medium, representing a polymer of chemical units, comprising generating an identifier including fields for storing values, each corresponding to properties of the polymer, at least one field stores a non-character-based value;

(2) a **database** , in a computer-readable medium, for storing information describing polymers, comprising data units corresponding to the polymers, each including an identifier that includes fields, each field for storing a value corresponding to properties of the polymer;

(3) determining if complete building blocks of a query sequence of chemical units match complete building blocks of a polysaccharide, comprising:

(a) generating at least one mask based on the values stored in the fields of a first data structure;

(b) performing at least one binary operation on the stored values in the fields of a second data structure using the mask to generate at least one result; and

(c) determining if the complete building blocks of the query sequence match the complete building blocks of the polysaccharide, based on the result;

(4) identifying a subpopulation of polymers having a property in common with a sample polymer of chemical units, comprising:

(a) applying an experimental constraint to the polymer to modify it;

(b) detecting a property of the modified polymer;

(c) identifying a population of polymers of chemical units having the same molecular length as the sample polymer; and

(d) identifying a subpopulation of the identified polymers having the same property as the modified polymer, by eliminating from the identified population polymers having non-corresponding properties;

(5) sequencing a polymer, comprising:

(a) modifying the polymer by applying an experimental constraint;

(b) detecting a property of the modified polymer;

(c) identifying a population of polymers having the same molecular length and weight as the sample polymer;

(d) identifying a subpopulation having the same property as the modified polymer, by eliminating polymers not having the corresponding properties; and

(e) repeating steps (a), (b) and (d) using additional constraints, until the subpopulation is reduced to a single polymer; and

(6) identifying a polysaccharide-protein interaction, involving contacting a protein-coated matrix assisted laser desorption ionization (MALDI) with a polysaccharide-containing sample, removing unbound

polysaccharide from the obtained polysaccharide-protein coated surface and carrying out MALDI mass spectrometry to identify the polysaccharide which has specifically interacted with the protein.

USE - The **database** can be used for generating a data **structure**, determining if properties of a **query** sequence **match** those of a polymer, determining if building blocks of a query sequence match complete building blocks of a polysaccharide, and determining the composition of a sample polymer of known molecular length. They can also be used for identifying a population having the same property as a sample polymer, identifying a subpopulation having a property in common with a sample polymer, and for compositional analysis of units of a sample polymer. The polymers which can be identified included polysaccharides, nucleic acids or polypeptides. (All claimed).

ADVANTAGE - The property encoded nomenclature (PEN) system allows rapid searching, answering of queries, identification of structural information and analysis, even in the case of complex polymers (e.g. polysaccharides) difficult to analyze by prior art methods.

DESCRIPTION OF DRAWING(S) - The figure is a block diagram of a computer system for storing and manipulating polymer information.

Computer system (100)
Polymer **database** (102)
Sample polymer (106)
Compositional analyzer (108)
Polymer composition data (110)
Sequencer (112)
Mass line (114)
Candidate list (116).
pp; 105 DwgNo 1/14

Title Terms: DATA; STRUCTURE; REPRESENT; POLYMER; SPECIFIC; NUCLEIC; ACID; FORM; NOTATION; RAPID; SEARCH; RESULT; RELATED; SEQUENCE
Derwent Class: B04; D16; D17; J04; T01
International Patent Class (Main): C08G-085/00; **G06F-019/00**
International Patent Class (Additional): G01N-031/00; **G06F-017/30**
File Segment: CPI; EPI

8/5/28 (Item 28 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0012044945 **Image available**
WPI Acc No: 2000-116798/200010
XRPX Acc No: N00-088414

Query generating method for searching information stored in databases **, electronic libraries**

Patent Assignee: LABELLE L (LABE-I); PARKER J U (PARK-I); SOCRATIX SYSTEMS INC (SOCR-N)
Inventor: ALTMAN R B; DUSCHKA O M; THOMPSON K A
Number of Countries: 019 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9966378	A2	19991223	WO 99US12922	A	19990608	200010	B
US 6178416	B1	20010123	US 9897849	A	19980615	200107	
US 20010003183	A1	20010607	US 9897849	A	19980615	200133	
			US 2000732094	A	20001207		

Priority Applications (No Type Date): US 9897849 A 19980615; US 2000732094 A 20001207
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9966378	A2	E	23	G06F-000/00	
	Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE				
US 6178416	B1			G06F-017/30	
US 20010003183	A1			G06F-007/00	Cont of application US 9897849

Abstract (Basic): WO 9966378 A2

NOVELTY - Library of query templates is stored in hard disks,

compatible disks with variable concepts like those defined in unified medical language system (UMLS) and keyword entered via keyboard, mouse etc. is abstracted to a concept. **Query templates matching** the concepts are instantiated and selected for use by the user to access information. In case of ambiguity one concept is selected and refined or generalized.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for query generating system.

USE - For searching information stored in structured **database** , electronic libraries and world wide web.

ADVANTAGE - Continual refining of concepts possible by successive abstraction, facilitates accessing of heterogeneous **databases** using library which relates keywords to concepts.

DESCRIPTION OF DRAWING(S) - The figure shows the implementation of the method for access of heterogeneous **databases** through medium like internet.

pp; 23 DwgNo 1/2

Title Terms: QUERY; GENERATE; METHOD; SEARCH; INFORMATION; STORAGE; ELECTRONIC

Derwent Class: S05; T01

International Patent Class (Main): **G06F-000/00** ; **G06F-007/00** ; **G06F-017/30**

File Segment: EPI

8/5/29 **(Item 29 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

012588648 **Image available**

WPI Acc No: 1999-394755/199933

XRPX Acc No: N99-295077

Online business mining method

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: AGGARWAL C C; YU P S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5920855	A	19990706	US 97868379	A	19970603	199933	B

Priority Applications (No Type Date): US 97868379 A 19970603

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5920855	A		13	G06F-017/30	

Abstract (Basic): US 5920855 A

NOVELTY - Data including user queries, minimum support and confidence levels, f-quantile level are input to a computer. Large item sets based on a predefined criteria are generated and stored. Data structure with an associated support value for each items is constructed. Items satisfying user **queries** are selected from data **structure** , based on which **association** rules are generated.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for program for online business mining.

USE - For designing well targeted marketing program.

ADVANTAGE - Provides computation efficiently for making online queries on a **database** to evaluate strength of association rules utilizing user supply levels of support and confidence as predictors.

DESCRIPTION OF DRAWING(S) - The figure shows the description of preprocessing stage of the algorithm in which all the primary item sets are generated.

pp; 13 DwgNo 2/7

Title Terms: BUSINESS; MINE; METHOD

Derwent Class: T01

International Patent Class (Main): **G06F-017/30**

File Segment: EPI

8/5/30 (Item 30 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012481053 **Image available**
WPI Acc No: 1999-287161/199927
Related WPI Acc No: 2003-265263
XRPX Acc No: N99-214453

Merchant system for online shopping and merchandising

Patent Assignee: MICROSOFT CORP (MICR-N)
Inventor: BLINN A; COHEN M A; LORTON M; STEIN G J

Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5897622	A	19990427	US 96732012	A	19961016	199927	B

Priority Applications (No Type Date): US 96732012 A 19961016
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5897622	A		33	G06F-017/60	

Abstract (Basic): US 5897622 A

NOVELTY - A **database** module (127) in communication with **database** and dynamic page generator, retrieves page data from the **database** from the **database** (121) and communicates page data to the dynamic page generator. The retrieved page data corresponds to query stored in the **database** .

DETAILED DESCRIPTION - Dynamic page generator (125) composes a page for display by processing template having **database** request for page data. The **database** includes single schema or several schemas. HTML structures (126) having templates are provided in communication with dynamic page generator. The **database** request of the **template** is **query** name. The **query** stored in the **database** , **corresponds** to query name. The **database** module retrieves data independent of **database** schema.

USE - For online shopping and merchandising through online network such as world wide web portion of Internet. For electronic transaction processing system including electronic cash register point of sale system such as batch processing of billing statement, subscription and telephone order system.

ADVANTAGE - Offers ability to obtain rich set of dynamically generated information from wide variety of data sources and also provides capability to perform large set of processing operations and computations on information prior to displaying the information. Eliminates restrictions of fixed, predefined **database** schemas, fixed order processing steps and computations and relatively inflexible display mechanisms. Guarantees shopper consistency and reliability in information used to make purchasing decisions, since shopper views special promotion information during order processing operations and uses the same calculations to display product information. Facilitates usage of configurable order processing module that enables merchants to add components to merchant system. Facilitates merchants to modify their **databases** and page displays without having to re-engineer the merchant system. Facilitates merchants to protect their investments in existing **database** by providing **database** schema independent query mechanism.

DESCRIPTION OF DRAWING(S) - The figure depicts diagram explaining data flow for dynamic page generator, order processing module and **database** module.

Database (121)
Dynamic page generator (125)
HTML structure (126)
Database module (127)
pp; 33 DwgNo 12/15

Title Terms: MERCHANT; SYSTEM; SHOPPING; MERCHANDISE
Derwent Class: T01
International Patent Class (Main): **G06F-017/60**
International Patent Class (Additional): **G06F-013/00** ; **G06F-015/16**

File Segment: EPI

8/5/31 (Item 31 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012470471 **Image available**
WPI Acc No: 1999-276579/199923
XRPX Acc No: N99-207323
Computer program product for retrieving multimedia objects such as still image, audio, video graphics etc using natural language such as English - stores program based on which agent role, action role and patient role are assigned corresponding to recognised syntactic and semantic structure of received query , to permit search of database
Patent Assignee: EASTMAN KODAK CO (EAST)
Inventor: BHANDARI A; JANISZEWSKI M E; MEHROTRA R
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5895464	A	19990420	US 97848207	A	19970430	199923	B

Priority Applications (No Type Date): US 97848207 A 19970430
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5895464	A		12	G06F-017/30	

Abstract (Basic): US 5895464 A
NOVELTY - Based on recognition of syntactic and semantic structure of received query, agent role that indicates an actor role who is performing action, an action role that identifies activity and patient role that identifies object affected by the action are assigned for permitting searching of multimedia object **database** to generate query response. DETAILED DESCRIPTION - In computer readable storage medium, program for retrieving multimedia objects is stored. Based on the stored program query in natural language for searching **database** is received and syntactic and semantic structure of query is recognized. Magnetic storage medium such as floppy disc or magnetic tape, or optical storage medium such as optical disc, optical tape or RAM or ROM, is used as storage medium. An INDEPENDENT CLAIM is included for describing retrieval method of multimedia object using natural language.
USE - For retrieving multimedia objects such as still image, audio, video graphics, computer generated graphics, drawings and associated description using natural language such as English. The computer program product uses text input for speech input or input from communication or multimedia capture storage devices such as still camera, video camera and video phone.
ADVANTAGE - Provides archival and retrieval system free of grammar restrictions so that syntactic and semantic formalities in search query are recognized and utilized by simple technique. Offers efficient and user-friendly system for input of information into **database** by requiring minimal interaction from user. DESCRIPTION OF DRAWING(S) - The figure depicts flow chart of software program for input of data using natural language.
Dwg.4/6
Title Terms: COMPUTER; PROGRAM; PRODUCT; RETRIEVAL; OBJECT; STILL; IMAGE; AUDIO; VIDEO; GRAPHIC; NATURAL; LANGUAGE; ENGLISH; STORAGE; PROGRAM; BASED; AGENT; ROLE; ACTION; ROLE; PATIENT; ROLE; ASSIGN; CORRESPOND; RECOGNISE; SYNTACTIC; STRUCTURE; RECEIVE; QUERY; PERMIT; SEARCH; **DATABASE**
Derwent Class: T01
International Patent Class (Main): **G06F-017/30**
File Segment: EPI

8/5/32 (Item 32 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012337087 **Image available**
WPI Acc No: 1999-143194/199912
Related WPI Acc No: 1999-143197; 2000-105922; 2000-106382; 2000-125904
XRPX Acc No: N99-104013

Apparatus for use in information retrieval system for retrieving stored documents from repository - ranks documents in output set as predefined function of first logical form of query and second logical form for each document in output set and provides ranked output containing stored entries associated with output document set

Patent Assignee: MICROSOFT CORP (MICT); MICROSOFT CORP (MICR-N)
Inventor: BRADEN-HARDER L; CORSTON S H; DOLAN W B; VANDERWENDE L H
Number of Countries: 022 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9905618	A1	19990204	WO 98US9711	A	19980513	199912	B
US 5933822	A	19990803	US 97898652	A	19970722	199937	
EP 996899	A1	20000503	EP 98922234	A	19980513	200026	
			WO 98US9711	A	19980513		
JP 2001511564	W	20010814	WO 98US9711	A	19980513	200154	
			JP 2000504525	A	19980513		
CN 1302412	A	20010704	CN 98808395	A	19980513	200158	

Priority Applications (No Type Date): US 97898652 A 19970722
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9905618	A1	E	107	G06F-017/30	
Designated States (National): CN JP					
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
US 5933822	A			G06F-017/00	
EP 996899	A1	E		G06F-017/30	Based on patent WO 9905618
Designated States (Regional): AT BE CH DE ES FR GB IE IT LI LU MC NL					
JP 2001511564	W		94	G06F-017/30	Based on patent WO 9905618
CN 1302412	A			G06F-017/30	

Abstract (Basic): WO 9905618 A

NOVELTY - The apparatus employs natural language processing to improve the accuracy of a keyword based document search performed by, for example, a statistical web search engine (20), by the production, comparison and weighting of matching logical forms associated with a search query and each of the retrieved documents (35). DETAILED DESCRIPTION - Apparatus includes a processor and a memory with stored executable instructions, which instructs the processor. It produces in response to a **query** a logical form portraying **semantic relationships** between words **associated** with the query. A corresponding second logical form for each different document in the output document set is obtained, this form portrays the semantic relationships between words associated with a phrase in the document.

USE - For providing apparatus and accompanying methods for an information retrieval system utilising natural language processing to process results retrieved by, for example, an information retrieval engine such as a conventional statistical based search engine, in order to improve overall precision. DESCRIPTION OF DRAWING(S) - The drawing shows depicts a very high level block diagram of an information retrieval system 5. (20) retrieval engine; (35) retrieved documents.

Dwg.1/12

Title Terms: APPARATUS; INFORMATION; RETRIEVAL; SYSTEM; RETRIEVAL; STORAGE; DOCUMENT; **REPOSITORY** ; RANK; DOCUMENT; OUTPUT; SET; PREDEFINED; FUNCTION ; FIRST; LOGIC; FORM; QUERY; SECOND; LOGIC; FORM; DOCUMENT; OUTPUT; SET; RANK; OUTPUT; CONTAIN; STORAGE; ENTER; ASSOCIATE; OUTPUT; DOCUMENT; SET
Derwent Class: T01
International Patent Class (Main): **G06F-017/00** ; **G06F-017/30**
File Segment: EPI

8/5/33 (Item 33 from file: 350)

012166970 **Image available**
WPI Acc No: 1998-583882/199849
XRPX Acc No: N98-454838

Free format data processing method e.g. for computer - processing free format data to produce text object associated with free format data with text object has several component nodes containing attribute type identifiers for elements of free format text and other data

Patent Assignee: HETHERINGTON G (HETH-I)
Inventor: HETHERINGTON G
Number of Countries: 083 Number of Patents: 007
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9848360	A1	19981029	WO 98AU288	A	19980422	199849	B
AU 9870147	A	19981113	AU 9870147	A	19980422	199913	
EP 1078323	A1	20010228	EP 98916644	A	19980422	200113	
			WO 98AU288	A	19980422		
US 6272495	B1	20010807	WO 98AU288	A	19980422	200147	
			US 98117776	A	19980806		
CN 1315020	A	20010926	CN 98814202	A	19980422	200206	
			WO 98AU288	A	19980422		
US 20020010714	A1	20020124	US 98117776	A	19980806	200210	
			US 2001898948	A	20010703		
JP 2002544616	W	20021224	WO 98AU288	A	19980422	200313	
			JP 2000618713	A	19980422		

Priority Applications (No Type Date): AU 97439 A 19970422
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9848360	A1	E	95	G06F-017/30	
Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
AU 9870147	A			G06F-017/30	Based on patent WO 9848360
EP 1078323	A1	E		G06F-017/30	Based on patent WO 9848360
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
US 6272495	B1			G06F-017/30	Based on patent WO 9848360
CN 1315020	A			G06F-017/30	
US 20020010714	A1			G06F-007/00	Div ex application US 98117776
JP 2002544616	W		99	G06F-017/30	Based on patent WO 9848360

Abstract (Basic): WO 9848360 A

The method involves examining elements of the data to determine attributes of the data, by examining the content of the elements and the contextual relationships of elements to each other, to determine semantic and syntactic information (attributes) about the data. Additional data relating to this information are produced, in the form of a text object which includes a pointer which enables access to the elements of the free-format data.

The additional data are accessible by a query processor to provide answers to **queries relating** to the **semantic** and **syntactic** information about the data and/or to access the data to manipulate the data.The free-format data are stored as a record in a free-format field of a **database** . The data remains stored in the computing system as it was originally stored, so it may be accessed by other applications. The text object includes an attribute - type identifier which identifies an attribute type of an element of the data. The text object includes a value indicating the character length of an element of the data.

ADVANTAGE - Obviates need for provision of separate **database** fields for each element of information with free format data processed in similar manner to way human being processes free format data.

Dwg.3/22

Title Terms: FREE; FORMAT; DATA; PROCESS; METHOD; COMPUTER; PROCESS; FREE; FORMAT; DATA; PRODUCE; TEXT; OBJECT; ASSOCIATE; FREE; FORMAT; DATA; TEXT; OBJECT; COMPONENT; NODE; CONTAIN; ATTRIBUTE; TYPE; IDENTIFY; ELEMENT; FREE; FORMAT; TEXT; DATA
Derwent Class: T01
International Patent Class (Main): **G06F-007/00 ; G06F-017/30**
International Patent Class (Additional): **G06F-012/00 ; G06F-017/20**
File Segment: EPI

8/5/34 (Item 34 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012079134 **Image available**
WPI Acc No: 1998-496045/199842
XRPX Acc No: N98-387408

Semantic analysis method for retrieving query based results - involves analysing query and expanding to include semantic context and alternative word forms before searching database

Patent Assignee: MICROSOFT CORP (MICR-N)
Inventor: DOLAN W B; HEIDORN G E; JENSEN K; MESSERLY J J; RICHARDSON S D
Number of Countries: 020 Number of Patents: 007
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9839714	A1	19980911	WO 98US3005	A	19980211	199842	B
EP 965089	A1	19991222	EP 98906476	A	19980211	200004	
			WO 98US3005	A	19980211		
US 6076051	A	20000613	US 97886814	A	19970307	200035	
CN 1252876	A	20000510	CN 98804175	A	19980211	200036	
US 6161084	A	20001212	US 97886814	A	19970307	200067	
			US 99366499	A	19990803		
US 6246977	B1	20010612	US 97886814	A	19970307	200135	
			US 99368071	A	19990803		
JP 2001513243	W	20010828	JP 98538539	A	19980211	200156	
			WO 98US3005	A	19980211		

Priority Applications (No Type Date): US 97886814 A 19970307; US 99366499 A 19990803; US 99368071 A 19990803
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9839714	A1	E	50	G06F-017/30	
Designated States (National): CN JP					
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
EP 965089	A1	E		G06F-017/30	Based on patent WO 9839714
Designated States (Regional): DE FR GB					
US 6076051	A			G06F-017/27	
CN 1252876	A			G06F-017/30	
US 6161084	A			G06F-017/27	Div ex application US 97886814 Div ex patent US 6076051
US 6246977	B1			G06F-017/27	Div ex application US 97886814
JP 2001513243	W		54	G06F-017/30	Based on patent WO 9839714

Abstract (Basic): WO 9839714 A

The information retrieval system has a **database** of documents that can be searched on the basis of text based queries. The system scans documents and indexes their content to facilitate searching. The user's query is also indexed by reducing words to tokens that have suffices removed. The **query** indexing also **associates semantic** content, e.g. subject, verb and object with words, e.g. man kiss pig.

The system further locates hypernyms of each of the words and creates additional search strings using these, e.g. person touch animal. All of these variation are then searched for in the **database** and results returned to the user.

ADVANTAGE - Increases the relevance of results returned by avoiding semantically incorrect forms and including related forms.

Dwg.12/18

Title Terms: ANALYSE; METHOD; RETRIEVAL; QUERY; BASED; RESULT; ANALYSE; QUERY; EXPAND; CONTEXT; ALTERNATIVE; WORD; FORM; SEARCH; **DATABASE**
Derwent Class: T01
International Patent Class (Main): **G06F-017/27** ; **G06F-017/30**
File Segment: EPI

8/5/35 **(Item 35 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
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011781254 **Image available**
WPI Acc No: 1998-198164/199818
XRPX Acc No: N98-157218
Heterogeneous database **access apparatus - has data cache area search unit that returns data, suitable to search conditions interpreted by inquiry processor, to application program after searching data cache area using local** database **access units**
Patent Assignee: MATSUSHITA DENKI SANGYO KK (MATU)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
[illegible]	A	19980220	JP 96208145	A	19960807	199818	B

Priority Applications (No Type Date): JP 96208145 A 19960807
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 10049410	A		14	G06F-012/00	

Abstract (Basic): JP 10049410 A

The apparatus accesses various local **databases** in response to an inquiry instruction from an application program, and returns a search result to the application program. Several local **database** access units (1071-107c) are used to acquire access results. A data cache area (105) is accessed by the local **database** access units, and stores the access results. A data cache unit (104) processes the acquired access results in the data cache area. A data-structure defining unit (102) connects a logical data structure unit with the inquiry instruction to the local **database** to define the data structure of the local **database** .

A data-structure storing area (103) stores the definition data from the data-structure defining unit. A inquiry processor (101) interprets the inquiry from the application program to determine if the cache data, **corresponding** to **search** data **structure** , are stored in the data cache area in order to search the data cache area. A data cache area search unit (106) returns the data, suitable for the search conditions interpreted by the inquiry processor, to the application program.

ADVANTAGE - Accesses several heterogenous **databases** for application program via network. Utilise latest data from limited local **database** .

Dwg.1/16

Title Terms: HETEROGENEOUS; **DATABASE** ; ACCESS; APPARATUS; DATA; CACHE; AREA; SEARCH; UNIT; RETURN; DATA; SUIT; SEARCH; CONDITION; INTERPRETATION ; ENQUIRY; PROCESSOR; APPLY; PROGRAM; AFTER; SEARCH; DATA; CACHE; AREA; LOCAL; **DATABASE** ; ACCESS; UNIT
Derwent Class: T01
International Patent Class (Main): **G06F-012/00**
International Patent Class (Additional): **G06F-017/30**
File Segment: EPI

8/5/36 **(Item 36 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
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011470356 **Image available**
WPI Acc No: 1997-448263/199741

XRPX Acc No: N97-373625
Computer-interpreted grammatical rules for generating queries in grammar for testing ODBC database engine driver - comprises static elements for generating constant parts of queries from rules and variable elements, e.g. query and query list elements, for generating driver parts of queries, with variable elements replaced by particular engine driver val
Patent Assignee: MICROSOFT CORP (MICR-N)
Inventor: FAST R W
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5664173	A	19970902	US 95562916	A	19951127	199741	B

Priority Applications (No Type Date): US 95562916 A 19951127
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5664173	A		26	G06F-017/30	

Abstract (Basic): US 5664173 A
The grammar, parsing method, and associated apparatus for automatically generating test commands to test an SQL **database** engine interface while reducing storage requirements and improving access time for such test commands as compared with prior test tools. The test tools and methods include a grammar for concise **syntactic** representation of a meta- **query** (also **referred** to as meta-language statement, **query** pattern, or **query template**). The meta- **query** defines an statement similar to the SQL language but includes query elements and query list elements used to generate a plurality of SQL test commands to be applied to the SQL **database** engine under test.
Test commands are generated from the meta-query to reduce storage requirements of prior test methods. Query elements are variable space holders in the meta-query and are replaced by a value appropriate to the SQL **database** engine under test when the meta-query is used to generate test commands. Query list elements define a list of values to be inserted in place of the query list element when generating the test commands from the meta-query.
USE/ADVANTAGE - E.g. for testing **database** engine drivers in Open **DataBase** Connection environment by automatic generation of test commands from meta-query pattern. Meta-language permits test commands to be expressed in concise, compact meta-language syntax. Simple, fast storage and modification of meta-queries.
Dwg.2/7
Title Terms: COMPUTER; INTERPRETATION; RULE; GENERATE; QUERY; GRAMMAR; TEST ; **DATABASE** ; ENGINE; DRIVE; COMPRISE; STATIC; ELEMENT; GENERATE; CONSTANT; PART; QUERY; RULE; VARIABLE; ELEMENT; QUERY; QUERY; LIST; ELEMENT; GENERATE; DRIVE; PART; QUERY; VARIABLE; ELEMENT; REPLACE; ENGINE ; DRIVE
Derwent Class: T01
International Patent Class (Main): **G06F-017/30**
File Segment: EPI

8/5/37 (Item 37 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011140757 **Image available**
WPI Acc No: 1997-118681/199711
XRPX Acc No: N97-097824
User query to database table query matching for computer databases - has program that compares user query to sub-queries of tables to generate list of only tables where sub-query includes portion of user query
Patent Assignee: WISCONSIN ALUMNI RES FOUND (WISC)
Inventor: IOANNIDIS Y E; SOLOMON M H; TSATALOS O G
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5600829	A	19970204	US 94300670	A	19940902	199711	B

Priority Applications (No Type Date): US 94300670 A 19940902
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
US 5600829   A   12 G06F-017/30

Abstract (Basic): US 5600829 A

The **database** includes at least two tables of stored data with physical structures that link data of particular attributes together according to relations. A sub-query is in the same form as the user query. A different sub-query is associated with each table and describes all of the attributes and relations of the table in query form. A program operating on an electronic computer communicates with the memory to accept a user query for the **database** from a user, compare the user query to the sub-queries of the tables to generate a list of only the tables where the sub-query includes a portion of the user query. The program operating on the electronic computer also generates a new query equivalent to the user query but directed to at least one table on the list. Executes the new query in place of the user query to respond to the user query.

ADVANTAGE - Permits drafting of **query** without **reference** to physical **structure** of data in computer memory.

Dwg.1/22

Title Terms: USER; QUERY; **DATABASE** ; TABLE; QUERY; MATCH; COMPUTER; PROGRAM; COMPARE; USER; QUERY; SUB; QUERY; TABLE; GENERATE; LIST; TABLE; SUB; QUERY; PORTION; USER; QUERY
Derwent Class: T01
International Patent Class (Main): **G06F-017/30**
File Segment: EPI

8/5/38 (Item 38 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010790425 **Image available**
WPI Acc No: 1996-287378/199629
XRPX Acc No: N96-241183

Providing extensible query architecture for information retrieval system - includes search application that has variety of code module classes, each implementing specific type of query model on data types in database

Patent Assignee: ARCHITEXT SOFTWARE INC (ARCH-N); EXCITE INC (EXCI-N)
Inventor: SPENCER G
Number of Countries: 068 Number of Patents: 008
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9618159	A2	19960613	WO 95US16496	A	19951207	199629	B
AU 9646413	A	19960626	AU 9646413	A	19951207	199641	
WO 9618159	A3	19960906	WO 95US16496	A	19951207	199645	
US 5577241	A	19961119	US 94350967	A	19941207	199701	
EP 796470	A1	19970924	EP 95944342	A	19951207	199743	
			WO 95US16496	A	19951207		
EP 796470	B1	19990414	EP 95944342	A	19951207	199919	
			WO 95US16496	A	19951207		
DE 69509118	E	19990520	DE 609118	A	19951207	199926	
			EP 95944342	A	19951207		
			WO 95US16496	A	19951207		
ES 2132769	T3	19990816	EP 95944342	A	19951207	199939	

Priority Applications (No Type Date): US 94350967 A 19941207
Cited Patents: Jnl.Ref; No-SR.Pub
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
WO 9618159   A2 E 26 G06F-017/30
Designated States (National): AL AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG UZ VN

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG
AU 9646413 A G06F-017/30 Based on patent WO 9618159
US 5577241 A 14 G06F-017/30
EP 796470 A1 E G06F-017/30 Based on patent WO 9618159
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
EP 796470 B1 E G06F-017/30 Based on patent WO 9618159
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
DE 69509118 E G06F-017/30 Based on patent EP 796470
Based on patent WO 9618159
ES 2132769 T3 G06F-017/30 Based on patent EP 796470
WO 9618159 A3 G06F-017/30

Abstract (Basic): WO 9618159 A
The system has an extensible query architecture which allows an applications programmer to integrate new query models into the system as desired. The architecture is based on an abstract base class of query nodes, or code objects that retrieve records from the **database** . Specific sub-classes are derived from the base class. Each query node class includes a search function that iteratively searches the **database** for matching records. Query node objects are instantiated by associated node creator class objects.
A parser is used to parse a search query into its components, including nested search queries used to combine various query models. The parser determines the particular search operator keywords and the node creator object. The node creator objects return pointers to the created query nodes.
ADVANTAGE - Allows parser to assemble complex hierarchical query nodes that combine multiple query models.
Dwg.1/6
Title Terms: EXTEND; QUERY; ARCHITECTURE; INFORMATION; RETRIEVAL; SYSTEM; SEARCH; APPLY; VARIETY; CODE; MODULE; CLASS; IMPLEMENT; SPECIFIC; TYPE; QUERY; MODEL; DATA; TYPE; **DATABASE**
Derwent Class: T01
International Patent Class (Main): **G06F-017/30**
File Segment: EPI

8/5/39 (Item 39 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010654571 **Image available**
WPI Acc No: 1996-151525/199615
XRPX Acc No: N96-127280
Chemical structure storage method using relational database **- storing matrix of chemical structure including atoms and bonds in relational database table and generating and storing search keys for each atom in chemical structure**
Patent Assignee: PSI INT INC (PSII-N); BRAZIL J (BRAZ-I); HOOVER J R (HOOV-I); MOORE J (MOOR-I); OXFORD MOLECULAR LTD (OXFO-N); OXFORD MOLECULAR GROUP INC (OXFO-N)
Inventor: BRAZIL J; HOOVER J R; MOORE J
Number of Countries: 060 Number of Patents: 010
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9606391	A2	19960229	WO 95US10171	A	19950810	199615	B
AU 9533202	A	19960314	AU 9533202	A	19950810	199625	
WO 9606391	A3	19960509	WO 95US10171	A	19950810	199630	
US 5577239	A	19961119	US 94288503	A	19940810	199701	
EP 777882	A1	19970611	EP 95929457	A	19950810	199728	
			WO 95US10171	A	19950810		
JP 10507285	W	19980714	WO 95US10171	A	19950810	199838	
			JP 96508133	A	19950810		
EP 777882	A4	19971229	EP 95929457	A	19950810	199840	
US 5950192	A	19990907	US 94288503	A	19940810	199943	

			US 96715708	A	19960919	
			US 97883165	A	19970626	
JP 3193383	B2	20010730	WO 95US10171	A	19950810	200146
			JP 96508133	A	19950810	
US 6304869	B1	20011016	US 94288503	A	19940810	200164
			US 96715708	A	19960919	
			US 97883165	A	19970626	
			US 99250440	A	19990216	

Priority Applications (No Type Date): US 94288503 A 19940810; US 96715708 A 19960919; US 97883165 A 19970626; US 99250440 A 19990216
Cited Patents: US 4811217; US 4855931; US 5025388; US 5056035; 1.Jnl.Ref; EP 213483; EP 90895; US 4642762; No-SR.Pub
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9606391	A2	E	38	G06F-000/00	
Designated States (National): AM AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KE KG KP KR KZ LK LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SI SK TJ TT UA US UZ VN					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG					
AU 9533202	A			G06F-019/00	Based on patent WO 9606391
WO 9606391	A3			G06F-000/00	
US 5577239	A		16	G06F-017/30	
EP 777882	A1	E		G06F-017/30	Based on patent WO 9606391
Designated States (Regional): CH DE FR GB LI					
JP 10507285	W		37	G06F-017/30	Based on patent WO 9606391
EP 777882	A4			G06F-000/00	
US 5950192	A			G06F-017/30	Cont of application US 94288503 Cont of application US 96715708 Cont of patent US 5577239
JP 3193383	B2		16	G06F-017/30	Previous Publ. patent JP 10507285 Based on patent WO 9606391
US 6304869	B1			G06F-017/30	Cont of application US 94288503 Cont of application US 96715708 Cont of application US 97883165 Cont of patent US 5577239 Cont of patent US 5950192

Abstract (Basic): WO 9606391 A

The method for storing chemical structures involves receiving the atoms of the chemical structure, and the bonds between the atoms, and constructing a matrix representation of the chemical structure including the atoms and the bonds. The matrix is stored in a relational **database** table, and one search key for each of the atoms in the chemical structure is generated and stored.

The method allows the user to optimally store and **search** chemical **structure** information including information **relating** to multi-valued atoms, multi-typed bonds, Markush searching etc in a relational **database** management system.

USE/ADVANTAGE - Relational **database** management for storage, searching and retrieval of chemical structure information in e.g pharmaceutical industries and chemical-related government agencies. Enables searching by e.g exact structure, sub- structure, key, chemical name, molecular formula etc. Allows routine integration of chemical data structure data with related information e.g inventory, spectroscopic data and clinical data via standard relational **database** techniques.

Dwg.1/12

Title Terms: CHEMICAL; STRUCTURE; STORAGE; METHOD; RELATED; **DATABASE** ; STORAGE; MATRIX; CHEMICAL; STRUCTURE; ATOM; BOND; RELATED; **DATABASE** ; TABLE; GENERATE; STORAGE; SEARCH; KEY; ATOM; CHEMICAL; STRUCTURE
Derwent Class: T01
International Patent Class (Main): **G06F-000/00** ; **G06F-017/30** ; **G06F-019/00**
File Segment: EPI

8/5/40 (Item 40 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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010632009 **Image available**
WPI Acc No: 1996-128962/199613
Related WPI Acc No: 1997-212303; 1999-254162
XRPX Acc No: N96-108516
Digital image archiving and receiving system for CDROM - has disambiguation processor connected to natural language database and data entry device of ingestion centre with browser viewing images according to query
Patent Assignee: SYSTEMS RES & APPL CORP (SYST-N)
Inventor: BALOGH A; BLEJER H; CHEN E; DOZIER L T; FLANK S; IANNACONE C; LORTON M; MALONEY J; MARTIN P; ROTHEY J; SCHMID G
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5493677	A	19960220	US 94255379	A	19940608	199613	B

Priority Applications (No Type Date): US 94255379 A 19940608
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5493677	A		27	G06F-017/30	

Abstract (Basic): US 5493677 A

The system has an ingestion centre including a data entry device for accepting as input an image and metadata. The metadata includes bibliographic data associated with the image, a caption associated with the image and a set of suggestions evoked by the image. A natural language processing **database** includes a number of terms. A disambiguation processor is connected to the data entry device and the natural language processing **database** , adapted to permit user selection of characteristics of portions of the metadata in response to the number of terms.

An image centre includes an upload processor connected to the ingestion centre and adapted to receive as input the image and the metadata. A **database** operatively connected to the upload processor stores the image and metadata with other images and other metadata. A browser connected to the **database** views a selective subset of the image and the other images **corresponding** to a **query** request with the **metadata** and other metadata.

ADVANTAGE - Allows image selection from library based on conceptual characteristics. Obtains immediate pricing information regarding selected images. Allows ordering of and obtaining production quality images directly.

Dwg.2/16

Title Terms: DIGITAL; IMAGE; RECEIVE; SYSTEM; PROCESSOR; CONNECT; NATURAL; LANGUAGE; **DATABASE** ; DATA; ENTER; DEVICE; INGESTION; CENTRE; VIEW; IMAGE ; ACCORD; QUERY
Derwent Class: T01
International Patent Class (Main): **G06F-017/30**
File Segment: EPI

8/5/41 (Item 41 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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010338229 **Image available**
WPI Acc No: 1995-240317/199531
XRPX Acc No: N95-187441
Database **operating method used in computer system to bidirectionally translate between graphical and text format - involves bilateral translation between text format and visual format and configuring tables and lists to define common data structure**
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: BANNING K R; BUCHER C K; LI S
Number of Countries: 001 Number of Patents: 001

Patent Family:
Patent No Kind Date Applicat No Kind Date Week
US 5428737 A 19950627 US 91778048 A 19911016 199531 B

Priority Applications (No Type Date): US 91778048 A 19911016
Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
US 5428737 A 52 G06F-003/153

Abstract (Basic): US 5428737 A
The method involves generating in the system a first data structure including a first link, which first data **structure relates** to a graphical format **query** . A second data **structure** including a second link is generated in the system, the second data **structure relating** to a text format **query** . Two links are used to bidirectionally translate between graphical format and text format queries.
The bidirectional translation is accomplished so that the graphical and the text formats are functionally equivalent queries. The data structures may be comprised of relational lists and may define Boolean operators. The **database** is relational and the text format query uses a structured query language.
ADVANTAGE - Unique elements of SQL statement can be selectively translated by user.
Dwg.43/47
Title Terms: **DATABASE** ; OPERATE; METHOD; COMPUTER; SYSTEM; BIDIRECTIONAL; TRANSLATION; GRAPHICAL; TEXT; FORMAT; BILATERAL; TRANSLATION; TEXT; FORMAT; VISUAL; FORMAT; TABLE; LIST; DEFINE; COMMON; DATA; STRUCTURE
Derwent Class: T01
International Patent Class (Main): **G06F-003/153**
International Patent Class (Additional): **G06F-017/30**
File Segment: EPI

8/5/42 (Item 42 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010329851 **Image available**
WPI Acc No: 1995-231694/199530
XRPX Acc No: N95-180627
Object-oriented rule-based directory system - has tree structure **with several nodes that** query **and browse** associated **directory service if such actions are supported by underlying service, to which existing directory services and other network services can be added**
Patent Assignee: TALIGENT INC (TALI-N)
Inventor: PETTUS C E
Number of Countries: 046 Number of Patents: 002
Patent Family:
Patent No Kind Date Applicat No Kind Date Week
WO 9516956 A1 19950622 WO 94US3986 A 19940411 199530 B
AU 9470144 A 19950703 AU 9470144 A 19940411 199542

Priority Applications (No Type Date): US 93169344 A 19931217
Cited Patents: 03Jnl.Ref
Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
WO 9516956 A1 E 41 G06F-009/46
Designated States (National): AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB HU JP KP KR KZ LK LU LV MG MN MW NL NO NZ PL PT RO RU SD SE SK UA UZ VN
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE
AU 9470144 A G06F-009/46 Based on patent WO 9516956

Abstract (Basic): WO 9516956 A
The system connects a client node to a server node (100, 112, 124, 132 and 138) over several different communication links and comprises a service program in the server node offering a service to the client

node (106, 108, 120, 122 and 128) and a storage. A second storage is located in the client node. Communications directory service programs are located in the client node and in the server node with a storing mechanism to store network configuration information for each network available service in the two stores.

A service object is stored in the server node including a network address for the server node and a reference to the stored network configuration information. The client node retrieves a stored service object from its store to set up a connection between the client and server nodes using a communication link. A rule based directory processor translates arbitrary **databases** and underlying directory services into common file format to facilitate browsing of arbitrary **databases** and underlying directory services on another node.

USE/ADVANTAGE - Each node uses re-configurable protocol stack to establish network connections to remote nodes. Obtains information directly from existing directory services and utilises information which it transforms into connectivity information.

Dwg.4/13

Title Terms: OBJECT; ORIENT; RULE; BASED; DIRECTORY; SYSTEM; TREE; STRUCTURE; NODE; QUERY; ASSOCIATE; DIRECTORY; SERVICE; ACTION; SUPPORT; UNDERLYING; SERVICE; EXIST; DIRECTORY; SERVICE; NETWORK; SERVICE; CAN; ADD

Index Terms/Additional Words: OBJECT; ORIENT; RULE; BASED; DIRECTORY

Derwent Class: T01

International Patent Class (Main): **G06F-009/46**

File Segment: EPI

8/5/43 (Item 43 from file: 350)

010260170 **Image available**

WPI Acc No: 1995-161425/199521

Related WPI Acc No: 1996-412466

XRPX Acc No: N95-126665

Heterogeneous data base **access by generating respective access procedures - uses dictionary for storing information such as** data base **organisation related to combination of basic data organisations forming each type of storage structure**

Patent Assignee: FUJITSU LTD (FUIT)

Inventor: HAYASHI K; HAYASHI T; ISHII T; MITANI M; OBATA T; OHSATO H; SAITOU K; SEKINE Y; URA M

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5408652	A	19950418	US 91745233	A	19910814	199521	B

Priority Applications (No Type Date): JP 90231452 A 19900831; JP 90231446 A 19900831

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5408652	A		75	G06F-015/40	

Abstract (Basic): US 5408652 A

The method involves accessing structure definition information for information relating to a combination of a number of different basic data organisations associated with a query from a dictionary. This is performed for scoring storage structure definition information relating to the combination of basic data organisations of each type of the number of storage structures

The method also entails generating an accessing procedure for forming a part of a **database** processing procedure to be prepared with access parts. Each of the access parts corresponds to an access method to each of the basic data organizations for each of a number of storage **structure** definitions **associated** with a **query** .

USE/ADVANTAGE - For supporting number of storage structures. Provision for efficient access to **data base** at high speed even in

case of clash of processor modules.
Dwg.2b/24
Title Terms: HETEROGENEOUS; DATA; BASE; ACCESS; GENERATE; RESPECTIVE; ACCESS; PROCEDURE; DICTIONARY; STORAGE; INFORMATION; DATA; BASE; ORGANISE ; RELATED; COMBINATION; BASIC; DATA; FORMING; TYPE; STORAGE; STRUCTURE
Derwent Class: T01
International Patent Class (Main): **G06F-015/40**
File Segment: EPI

8/5/44 (Item 44 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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009483737 **Image available**
WPI Acc No: 1993-177272/199322
XRPX Acc No: N93-135856
Multiple version database **concurrency control system - maintains uncommitted list of all transactions with n versions of** database **for access by queries**
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: LORIE R A; MOHAN C; PIRAHESH M H
Number of Countries: 004 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 544517	A2	19930602	EP 92310783	A	19921125	199322	B
US 5280612	A	19940118	US 91801769	A	19911126	199404	
EP 544517	A3	19931027	EP 92310783	A	19921125	199511	

Priority Applications (No Type Date): US 91801769 A 19911126
Cited Patents: No-SR.Pub; 1.Jnl.Ref; EP 501180; US 4627019; WO 8400426
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 544517	A2	E	25	G06F-015/403	
Designated States (Regional): DE FR GB					
US 5280612	A		21	G06F-015/40	
EP 544517	A3			G06F-015/403	

Abstract (Basic): EP 544517 A
The system maintains n versions of a **database** with the versions including a present version (V) and at least one present stable version the first of which is (V-1) and has an arrangement for maintaining a dynamic uncommitted list of all transactions.
A second arrangement maintains one or more versions of a non stable and uncommitted list (NSUL) of all transactions that are either uncommitted or committed earlier than during the **corresponding** present version. A third **arrangement** directs all **queries** that arrive during version period (V) to a present stable version and a fourth part about all queries or waits until terminated to set the NSUL version equal to the dynamic UL and initiates a new period (V+1).
ADVANTAGE - Provides consistent stable state of **database** for read only access to avoid lock conflicts.
Dwg.1/3
Title Terms: MULTIPLE; VERSION; **DATABASE** ; CONTROL; SYSTEM; MAINTAIN; UNCOMMITTED; LIST; TRANSACTION; N; VERSION; **DATABASE** ; ACCESS; QUERY
Derwent Class: T01
International Patent Class (Main): **G06F-015/40** ; **G06F-015/403**
International Patent Class (Additional): **G06F-012/00**
File Segment: EPI

8/5/45 (Item 45 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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007658694 **Image available**
WPI Acc No: 1988-292626/198841
XRPX Acc No: N88-222106

Database **management system with active data dictionary - has query appts. to change data dictionary to corresp. to data model changes for user application program**

Patent Assignee: AMERICAN TELEPHONE & TELEGRAPH CO (AMTT)
Inventor: KUMPATI M
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 4774661	A	19880927	US 85799061	A	19851119	198841	B

Priority Applications (No Type Date): US 85799061 A 19851119
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4774661	A		16		

Abstract (Basic): US 4774661 A

The **database** management system runs on a computer serving a number of users and interfaces a number of user application programs to a **database** for managing sets of data stored on the **database** . The management system includes a data dictionary for specifying relationships between each of the user application programs and the sets of data stored in the **database** associated with each user application program. Data model appts. controls the definition of the specified relationship of the data dictionary, and query appts. is responsive to change commands from a user application program for modifying the data model.

The query appts. includes appts. responsive to the change commands for changing the data dictionary to **correspond** to the data **model** changes. The **query** appts. further includes appts. responsive to a data request from the user application program for accessing the requested sets of data from the **database** .

ADVANTAGE - User can write generic programs which are logically independent of data

Title Terms: **DATABASE** ; MANAGEMENT; SYSTEM; ACTIVE; DATA; DICTIONARY; QUERY; APPARATUS; CHANGE; DATA; DICTIONARY; CORRESPOND; DATA; MODEL; CHANGE; USER; APPLY; PROGRAM
Derwent Class: T01
International Patent Class (Additional): **G06F-015/40**
File Segment: EPI

8/5/46 (Item 46 from file: 350)

007056521
WPI Acc No: 1987-056518/198708
XRAM Acc No: C87-023647
XRPX Acc No: N87-042910

Markush structure database **system which can handle Markush queries - in which separate specific atom and generic term connection tables are linked to reference data e.g. patent nuMbers**

Patent Assignee: AMER CHEMICAL SOC (AMCH-N)
Inventor: FISANICK W
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 4642762	A	19870210	US 84614219	A	19840525	198708	B

Priority Applications (No Type Date): US 84614219 A 19840525
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4642762	A		37		

Abstract (Basic): US 4642762 A

A method for graphically storing and searching Markush formulae using a computer comprises: (a) forming a file in which each Markush is stored in 2 forms:- (1) Specific multiple connectivity node (SpMCN)

representation of all of the individual specific structural representations (ISSR's) of the formula, in which all the atoms and groups constituting each variable are all attached simultaneously to the atom the variable, so that it is treated as if its valency has been raised to a value high enough to encompass all these connections. (2) Generic multiple connectivity node (GnMCN) representation, of all the implicit individual generic structural representations (IGSR's) of the formula. This is analogous to the SpMCN, but consists of generic terms. (3) Reference data is associated with the records for each Markush. (b) A query structure is expressed as a GnMCN, and each IGSR of this is compared with each IGSR in the title, to obtain a set of answers in which for each answer, there is an IGSR in the SnMCN which matches an IGSR derived from the query Markush. This matching can be by overlap or embedment of the **query structure** in the **database structure** . **Reference** data is recovered for the answers.

USE/ADVANTAGE - The system provides a searchable graphical **database** of Markush formulae and associated data, such as patent numbers. The query may also be a Markush. It is intended to offer total recall combined with very high precision in retrieval.

18/5/39 (Item 38 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010443433 **Image available**
WPI Acc No: 1995-344752/199544
XRPX Acc No: N95-257636

Database query system for forming semantically correct queries - uses query expert system to monitor structure of query and prevent user from building semantically incorrect queries

Patent Assignee: SOFTWARE AG (SOFT-N); SPEEDWARE LTEE (SPEE-N)
Inventor: SHWARTZ S P; SCHWARTZ S P
Number of Countries: 062 Number of Patents: 010
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9526003	A1	19950928	WO 95IB517	A	19950323	199544	B
AU 9526816	A	19951009	AU 9526816	A	19950323	199603	
US 5584024	A	19961210	US 94217099	A	19940324	199704	
EP 803100	A1	19971029	EP 95921945	A	19950323	199748	
			WO 95IB517	A	19950323		
JP 9510565	W	19971021	JP 95524526	A	19950323	199801	
			WO 95IB517	A	19950323		
US 5812840	A	19980922	US 94217099	A	19940324	199845	
			US 96723962	A	19960926		
MX 9604236	A1	19971201	MX 964236	A	19960923	199936	
EP 803100	B1	19991222	EP 95921945	A	19950323	200004	
			WO 95IB517	A	19950323		
DE 69514123	E	20000127	DE 614123	A	19950323	200012	
			EP 95921945	A	19950323		
			WO 95IB517	A	19950323		
CA 2186345	C	20000606	CA 2186345	A	19950323	200041	
			WO 95IB517	A	19950323		

Priority Applications (No Type Date): US 94217099 A 19940324; US 96723962 A 19960926
Cited Patents: 03Jnl.Ref; EP 287310; EP 387226; US 4688195
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9526003	A1	E	102	G06F-017/30	
Designated States (National): AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA US UZ VN					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG					
AU 9526816	A			G06F-017/30	Based on patent WO 9526003
US 5584024	A		63	G06F-017/30	
EP 803100	A1	E		G06F-017/30	Based on patent WO 9526003
Designated States (Regional): AT BE CH DE DK ES FR GB IE IT LI NL PT SE					
JP 9510565	W		124	G06F-017/30	Based on patent WO 9526003
US 5812840	A			G06F-017/30	Cont of application US 94217099 Cont of patent US 5584024
MX 9604236	A1			G06F-017/30	
EP 803100	B1	E		G06F-017/30	Based on patent WO 9526003
Designated States (Regional): AT BE CH DE DK ES FR GB IE IT LI NL PT SE					
DE 69514123	E			G06F-017/30	Based on patent EP 803100 Based on patent WO 9526003
CA 2186345	C	E		G06F-017/30	Based on patent WO 9526003

Abstract (Basic): WO 9526003 A

The system includes a conceptual layer manager for storing conceptual information about the database including a predetermined structure and a query assistant which provides the user with a set of permissible selections from which to build a semantically correct database query for the database in an intermediate query language. A query generator receives a query in the intermediate query language from the query assistant and converts the query into the target query language.

The user enters a query through a set of dialogue boxes in an

intermediate language. A query expert system monitors the query as it is built, and using the information about the structure of the database, prevents the user from building semantically incorrect queries by disallowing choices in the dialogue box which would create incorrect queries.

USE/ADVANTAGE - Guiding user to interactively create correct queries using structured query language, SQL. Permits user to enter only queries that are both syntactically and semantically valid.

Dwg.5/11b

Title Terms: DATABASE; QUERY; SYSTEM; FORMING; CORRECT; QUERY; QUERY; EXPERT; SYSTEM; MONITOR; STRUCTURE; QUERY; PREVENT; USER; BUILD; INCORRECT; QUERY
Derwent Class: T01
International Patent Class (Main): G06F-017/30
International Patent Class (Additional): G06F-012/00; G06F-017/27
File Segment: EPI

18/5/40 (Item 39 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010269102 **Image available**
WPI Acc No: 1995-170357/199522
XRPX Acc No: N95-133524

Computer implemented data retrieval system - generates bit map for each accessed data field by assigning one bit to each contiguously stored data field entry

Patent Assignee: FDC INC (FDCF-N)
Inventor: EMERSON M G; PILLAI S; WESTMAN K R; PALLAI S
Number of Countries: 003 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9511487	A1	19950427	WO 94US12074	A	19941024	199522	B
GB 2298941	A	19960918	WO 94US12074	A	19941024	199641	
			GB 968315	A	19960422		
GB 2298941	B	19980204	WO 94US12074	A	19941024	199808	
			GB 968315	A	19960422		
US 5845276	A	19981201	US 93141285	A	19931022	199904	
			US 95580473	A	19951229		

Priority Applications (No Type Date): US 93141285 A 19931022; US 95580473 A 19951229
Cited Patents: 05Jnl.Ref; US 3964029; US 4751635; US 4785400; US 5263159; US 5299197
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9511487	A1		353	G06F-017/00	
Designated States (National): CA GB					
GB 2298941	A		1	G06F-017/30	Based on patent WO 9511487
GB 2298941	B			G06F-017/30	Based on patent WO 9511487
US 5845276	A			G06F-017/30	Cont of application US 93141285

Abstract (Basic): WO 9511487 A

The data retrieval system includes a database server with data storage for storing rotated standard relational **database** records in rows. The **columns** of data **fields** across each record are stored contiguously. A terminal is connected to the database server for sending queries to the database server for storing, retrieving and updating the contiguously stored data fields.

The database server has a programmed processor for processing the **queries** to determine which contiguously stored data **fields** will be accessed. The processor has a bit map processor for processing the data fields accessed.

USE/ADVANTAGE - Allows direct marketing personnel to reduce time and enhance efficiency of searches performed on direct marketing data records.

Dwg.10/11

Title Terms: COMPUTER; IMPLEMENT; DATA; RETRIEVAL; SYSTEM; GENERATE; BIT; MAP; ACCESS; DATA; FIELD; ASSIGN; ONE; BIT; CONTIGUOUS; STORAGE; DATA; FIELD; ENTER
Derwent Class: T01
International Patent Class (Main): G06F-017/00; G06F-017/30
International Patent Class (Additional): G06F-019/00
File Segment: EPI

18/5/41 (Item 40 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010245852 **Image available**
WPI Acc No: 1995-147107/199519
XRPX Acc No: N95-115526
Database retrieval method - by creating queries comprising search expressions generated to supplement each word in input data series, search expression has terms and phrases equivalent to each input word
Patent Assignee: AT & T CORP (AMTT)
Inventor: BOHM C P; NOWITZ D A; SIMON J J
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5404507	A	19950404	US 92844045	A	19920302	199519	B

Priority Applications (No Type Date): US 92844045 A 19920302
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5404507	A		10	G06F-015/40	

Abstract (Basic): US 5404507 A
The method involves the use of a database interrogation system. It searches for records of database items when the input data (301) is incomplete. It automatically creates queries with a high probability of finding the correct item in the database. The input data is a string of target words. The query is created by examining each one of the target words.
When the target words are examined (302) a set of search expressions is created (304) from a search expression database. They provide an equivalent representation of the target words input string. The database has words, abbreviation and acronyms equivalent to the words in a **field** of the **database** . The creation of a **search expression** increase the likelihood of retrieving the correct item in the database. The set of search expressions are combined in ordered queries. They are executed in the assigned order. The records of items retrieved from the database are evaluated according to a predetermined parameter. The item best fitting the original input target words string is selected.
USE/ADVANTAGE - For e.g. electronic mail order when data is not complete or partially incorrect. Cost effective, uniform results.
Dwg.3/3
Title Terms: DATABASE; RETRIEVAL; METHOD; QUERY; COMPRISE; SEARCH; EXPRESS; GENERATE; SUPPLEMENT; WORD; INPUT; DATA; SERIES; SEARCH; EXPRESS; TERM; PHRASE; EQUIVALENT; INPUT; WORD
Derwent Class: T01
International Patent Class (Main): G06F-015/40
File Segment: EPI

18/5/42 (Item 41 from file: 350)
DIALOG(R)File 350:Derwent WPIX

009658370 **Image available**
WPI Acc No: 1993-351922/199344
XRPX Acc No: N93-271427
Machine learning system using relational database - examines selected

entry in database , query database **for representative entries, and predict** field **values for selected entry**
Patent Assignee: INFERENCE CORP (INFE-N)
Inventor: ALLEN B P
Number of Countries: 042 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9321587	A2	19931028	WO 93US3558	A	19930414	199344	B
AU 9342869	A	19931118	AU 9342869	A	19930414	199410	
WO 9321587	A3	19931125	WO 93US3558	A	19930414	199514	

Priority Applications (No Type Date): US 92869935 A 19920415
Cited Patents: No-SR.Pub; 2.Jnl.Ref; US 4930071
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9321587	A2	E	27	G06F-015/18	
	Designated States (National): AT AU BB BG BR CA CH CZ DE DK ES FI GB HU JP KP KR KZ LK LU MG MN MW NL NO NZ PL PT RO RU SD SE SK UA VN				
	Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE				
AU 9342869	A			G06F-015/18	Based on patent WO 9321587
WO 9321587	A3			G06F-015/18	

Abstract (Basic): WO 9321587 A
The machine learning system operates in conjunction with a relational database. The system examines a selected entry in the database, query the database for a set of entries which are representative of the selected entry, and predict a value for one or more fields of the selected entry in response to the set of representative entries.
The system also evaluates each entry and record an indication of accuracy or utility (or other values) of that entry for predicting one or more fields. The system implements a case-based reasoning system, or an autonomous learning system, with a relational **database** . The predicted values for the entry **fields** are then compared with the actual values.
USE/ADVANTAGE - In machine learning systems. Capable of operating with relational database.
Dwg.1/28
Title Terms: MACHINE; LEARNING; SYSTEM; RELATED; DATABASE; SELECT; ENTER; DATABASE; QUERY; DATABASE; REPRESENT; ENTER; PREDICT; FIELD; VALUE; SELECT; ENTER
Derwent Class: T01
International Patent Class (Main): G06F-015/18
International Patent Class (Additional): G06F-015/40
File Segment: EPI

18/5/43 (Item 42 from file: 350)
DIALOG(R)File 350:Derwent WPIX

007079538
WPI Acc No: 1987-079535/198711
XRPX Acc No: N87-060131
Data-base system query and update processing control method - giving queries access to all entries with past and future code field values during UPDATA state
Patent Assignee: AT & T BELL LAB (AMTT)
Inventor: GALLANT J K
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 4648036	A	19870303	US 85708963	A	19850306	198711	B

Priority Applications (No Type Date): US 85708963 A 19850306
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes

Abstract (Basic): US 4648036 A

Each changeable data entry in the **database** is associated with individual code **field** . When no update transaction is in progress, every code field is set to a first value. An update transaction is begun by changing a system state parameter from a NON-UPDATE to an UPDATE state. During the UPDATE state, the code fields of data entries to be added are marked with a second value and then inserted into the **database** . Code **fields** of entries to be deleted are marked with a third value.

When this is complete, the system state parameter is set to a POST-UPDATE state. All code fields are then returned to the first value at which time the system is returned to the NON-UPDATE state. During the UPDATE state, all queries are given access to entries with first and third code **field** value. Conversely during the POST-UPDATE state, **queries** are allowed access only to entries with first and second code field values.

ADVANTAGE - Database structure is homogeneous so that there is no need for control structures to account for special cases such as 'shadow' pages. There is effectively no interval of time that query processes are locked out due to update transaction because only system state parameter need be changed to switch from present to future data structures

21/5/8 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013707038 **Image available**
WPI Acc No: 2001-191262/200119
XRPX Acc No: N01-135960
Method for providing biological data processing using a multi- database query **system receives** queries **in** structure **form and** translates **part of the received query into commands recognized by a data manipulation server**
Patent Assignee: GENE LOGIC INC (GENE-N)
Inventor: TOPALOGLOU T
Number of Countries: 095 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200101294	A2	20010104	WO 2000IB863	A	20000628	200119	B
AU 200054179	A	20010131	AU 200054179	A	20000628	200124	
EP 1228447	A2	20020807	EP 2000938960	A	20000628	200259	
			WO 2000IB863	A	20000628		

Priority Applications (No Type Date): US 99141424 P 19990629
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200101294	A2	E	28	G06F-017/30	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200054179	A		G06F-017/30	Based on patent WO 200101294
EP 1228447	A2	E	G06F-017/30	Based on patent WO 200101294

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

Abstract (Basic): WO 200101294 A2
NOVELTY - The system queries (34) several **databases** and servers and has an input receiving queries in a structured form suitable for querying **databases** , while a translation server translates part of the received query into commands recognized by a data manipulation server. A processor parses the received query into parts based on the **database** and servers to which they relate.
DETAILED DESCRIPTION - Independent claims describe a method for accessing data manipulation server from a multi- **database** query system and a method for performing a **database** search.
USE - For providing biological data processing using a multi- **database** query system.
DESCRIPTION OF DRAWING(S) - The drawing shows a schematic illustration of the multi- **database** query system.
the query processor (34)
pp; 28 DwgNo 1/2
Title Terms: METHOD; BIOLOGICAL; DATA; PROCESS; MULTI; **DATABASE** ; QUERY; SYSTEM; RECEIVE; QUERY; STRUCTURE; FORM; TRANSLATION; PART; RECEIVE; QUERY; COMMAND; RECOGNISE; DATA; MANIPULATE; SERVE
Derwent Class: S05; T01
International Patent Class (Main): G06F-017/30
File Segment: EPI

21/5/9 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013223596 **Image available**
WPI Acc No: 2000-395470/200034
XRPX Acc No: N00-297224
Document searching procedure in information retrieval system, involves

selecting suitable word which is semantically similar to user chosen word in a set query and expanding query logically, using selected word

Patent Assignee: NEC CORP (NIDE); LI W (LIWW-I); NEC USA INC (NIDE)
Inventor: LI W
Number of Countries: 002 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2000137738	A	20000516	JP 99140695	A	19990520	200034	B
US 20020059161	A1	20020516	US 98185323	A	19981103	200237	
US 6480843	B2	20021112	US 98185323	A	19981103	200278	
JP 3428630	B2	20030722	JP 99140695	A	19990520	200350	

Priority Applications (No Type Date): US 98185323 A 19981103
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2000137738	A		19	G06F-017/30	
US 20020059161	A1			G06F-007/00	
US 6480843	B2			G06F-017/30	
JP 3428630	B2		17	G06F-017/30	Previous Publ. patent JP 2000137738

Abstract (Basic): JP 2000137738 A

NOVELTY - A word which is semantically similar to the word designated by user in original query and also suitable to the **query syntax** , is selected, initially. Then, the **query** is expanded logically to **convert** it into suitable higher order form using the selected word. Document relevant to the query is searched using a converted index attachment.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for query extension method.

USE - For collecting documents from **database** in information retrieval system.

ADVANTAGE - By suitable query extension using index of small size, related document is retrieved from **database** effectively.

pp; 19 DwgNo 1/12

Title Terms: DOCUMENT; SEARCH; PROCEDURE; INFORMATION; RETRIEVAL; SYSTEM; SELECT; SUIT; WORD; SIMILAR; USER; CHOICE; WORD; SET; QUERY; EXPAND; QUERY; LOGIC; SELECT; WORD
Derwent Class: T01
International Patent Class (Main): G06F-007/00; G06F-017/30
File Segment: EPI

21/5/10 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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013193068 **Image available**
WPI Acc No: 2000-364941/200031
Related WPI Acc No: 2000-350445; 2000-364925; 2000-364933; 2000-364943; 2002-506611
XRPX Acc No: N00-273128

Data accessing method using structure query **language input, involves** transforming **hierarchical data store into relational** database **tables, based on received SQL input, using which SQL input is executed**

Patent Assignee: COMPUTER ASSOC THINK INC (COMP-N)
Inventor: BARI A; DEFFLER T
Number of Countries: 082 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200023917	A1	20000427	WO 99US23876	A	19991015	200031	B
AU 200014452	A	20000508	AU 200014452	A	19991015	200037	
BR 9914427	A	20010626	BR 9914427	A	19991015	200140	
			WO 99US23876	A	19991015		
EP 1121655	A1	20010808	EP 99970761	A	19991015	200146	
			WO 99US23876	A	19991015		
CN 1323424	A	20011121	CN 99812191	A	19991015	200218	
JP 2002528793	W	20020903	WO 99US23876	A	19991015	200273	
			JP 2000577590	A	19991015		

Priority Applications (No Type Date): US 98104682 P 19981016
Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
WO 200023917 A1 E 13 G06F-017/30
Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HU ID IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
AU 200014452 A G06F-017/30 Based on patent WO 200023917
BR 9914427 A G06F-017/30 Based on patent WO 200023917
EP 1121655 A1 E G06F-017/30 Based on patent WO 200023917
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
CN 1323424 A G06F-017/30
JP 2002528793 W 13 G06F-017/30 Based on patent WO 200023917

Abstract (Basic): WO 200023917 A1
NOVELTY - The method involves transforming a hierarchical data store (4) into relational **database** tables, based on the received SQL input. Then, SQL input is executed using the transformed tables.
USE - For accessing data stored in hierarchical data store through SQL input using open **database** connectivity (ODBC).
ADVANTAGE - The ODBC driver allows non-relational data store such as hierarchical object/property model without causing any trouble.
DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of ODBC driver interfaced between SQL report generator and hierarchical data store.
Hierarchical data store (4)
pp; 13 DwgNo 1/3
Title Terms: DATA; ACCESS; METHOD; STRUCTURE; QUERY; LANGUAGE; INPUT; TRANSFORM; HIERARCHY; DATA; STORAGE; RELATED; **DATABASE** ; TABLE; BASED; RECEIVE; SQL; INPUT; SQL; INPUT; EXECUTE
Derwent Class: T01
International Patent Class (Main): G06F-017/30
International Patent Class (Additional): G06F-012/00
File Segment: EPI

21/5/11 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012611945 **Image available**
WPI Acc No: 1999-418049/199935
XRPX Acc No: N99-312040
Network survey information storing method for resource management and performance monitoring of network e.g. intranet
Patent Assignee: SUN MICROSYSTEMS INC (SUNM)
Inventor: BARROUX J C
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No Kind Date Applicat No Kind Date Week
US 5923850 A 19990713 US 96672640 A 19960628 199935 B

Priority Applications (No Type Date): US 96672640 A 19960628
Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
US 5923850 A 30 G06F-015/177

Abstract (Basic): US 5923850 A
NOVELTY - A series of configuration information relating to target network node is received from network surveying tool. When modification of configuration information is detected, a new record including modified configuration information, current time as first update time and information uniquely identifying target network node, is appended

to series of records for target network node.

DETAILED DESCRIPTION - When configuration information is not modified, current time is stored as last update time in last record of series of records for target network node. INDEPENDENT CLAIMS are also included for the following:

(a) network survey information storing system;

(b) network survey information storing program

USE - For resource management and performance monitoring of network e.g. intranet.

ADVANTAGE - Provides snapshot of current status of network and also track **changes** in **configuration** over time. **Queries** of **database** concerning **changes** in network configuration can be readily generated.

DESCRIPTION OF DRAWING(S) - The figure shows flowchart of network survey information storing method.

pp; 30 DwgNo 8/18

Title Terms: NETWORK; SURVEYING; INFORMATION; STORAGE; METHOD; RESOURCE; MANAGEMENT; PERFORMANCE; MONITOR; NETWORK

Derwent Class: T01

International Patent Class (Main): G06F-015/177

File Segment: EPI

21/5/12 (Item 11 from file: 350)

DIALOG(R)File 350:Derwent WPIX

011030956 **Image available**

WPI Acc No: 1997-008880/199701

XRPX Acc No: N97-008090

Database **structure conversion - involves structured-** query **-language sentence** conversion **from physical** structure **into logic structure figure on table definition information** database

Patent Assignee: NEC CORP (NIDE)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 8278979	A	19961022	JP 9581518	A	19950406	199701	B

Priority Applications (No Type Date): JP 9581518 A 19950406

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8278979	A		4	G06F-017/30	

Abstract (Basic): JP 8278979 A

The method involves automatic bi-directional updating of computer system logic structure in **database** table definition information. The computer system logic structure is derived from a physical structure.

The physical structure is retrieved from an external memory (23) by a structured-query-language decipher unit (11) constituted by an SQL sentence which is decomposed into several physical sentence components. The sentence components are converted into logical structures by a structure figure generator (12).

ADVANTAGE - Maintains conformity between logic structure and information on table definition information.

Dwg.1/4

Title Terms: **DATABASE** ; STRUCTURE; CONVERT; STRUCTURE; QUERY; LANGUAGE; SENTENCE; CONVERT; PHYSICAL; STRUCTURE; LOGIC; STRUCTURE; FIGURE; TABLE; DEFINE; INFORMATION; **DATABASE**

Index Terms/Additional Words: **SQLDatab ase stru**

Derwent Class: T01

International Patent Class (Main): G06F-017/30

International Patent Class (Additional): G06F-012/00

File Segment: EPI

21/5/13 (Item 12 from file: 350)

DIALOG(R)File 350:Derwent WPIX

011000877 **Image available**
WPI Acc No: 1996-497826/199649
XRPX Acc No: N96-419765
Modelling for conversion between object and relational systems - has user object database **modelled in relational** database **and provides converter for changes and queries between them.**
Patent Assignee: ASPECT DEV INC (ASPE-N); I2 TECHNOLOGIES US INC (ITWO-N)
Inventor: ALTHOFF J; BELANGER K; KOUSHIK R; LEE S; MCGINNIS B; MCWILLIAMS F ; PRASAD N; ZHANG Y
Number of Countries: 022 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9634350	A1	19961031	WO 96US5678	A	19960423	199649	B
EP 823092	A1	19980211	EP 96913086	A	19960423	199811	
			WO 96US5678	A	19960423		
JP 11504451	W	19990420	JP 96532654	A	19960423	199926	
			WO 96US5678	A	19960423		
US 6374252	B1	20020416	US 95428003	A	19950424	200232	
			US 95521667	A	19950831		
			US 97951714	A	19971016		

Priority Applications (No Type Date): US 95521667 A 19950831; US 95428003 A 19950424; US 97951714 A 19971016
Cited Patents: EP 504085; US 5291583; US 5295256; WO 9503586; WO 9512172
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9634350	A1	E	71	G06F-017/30	
Designated States (National): CA FI JP KR					
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
EP 823092	A1	E		G06F-017/30	Based on patent WO 9634350
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
JP 11504451	W		79	G06F-017/30	Based on patent WO 9634350
US 6374252	B1			G06F-017/30	Cont of application US 95428003
					Cont of application US 95521667

Abstract (Basic): WO 9634350 A
The apparatus includes an object-oriented **database** (100) which can be created, edited and manipulated as an object oriented **database** . The **database** is maintained as a relational **database** . The user has an interface (211) for manipulating his **database** . This is coupled via a subsystem (210) to models (230,260) of the user **database** and **queries** . The user **model** provides a **translation** between the object-oriented system and the relational **database** (250).
The user model is also represented by a meta model (220) represented in the relational **database** . Object-oriented accesses, changes of data and structure are bi-directionally converted between the two **database** structures.
ADVANTAGE - Combines the user convenience of object-oriented **databases** with the advantages of relational **databases** .
Dwg.2/9
Title Terms: MODEL; CONVERT; OBJECT; RELATED; SYSTEM; USER; OBJECT; **DATABASE** ; MODEL; RELATED; **DATABASE** ; CONVERTER; CHANGE; QUERY
Derwent Class: T01
International Patent Class (Main): G06F-017/30
International Patent Class (Additional): G06F-012/00
File Segment: EPI

21/5/14 (Item 13 from file: 350)
DIALOG(R)File 350:Derwent WPIX

007507897 **Image available**
WPI Acc No: 1988-141830/198821
XRPX Acc No: N88-108308
Domain-independent natural language database **interface** - translates

navigation operations to database queries **with parser using** semantic **variables to enforce** query **correctness**

Patent Assignee: NORTHERN TELECOM LTD (NELE)
Inventor: ALI Y B; AUBIN R; HALL B T
Number of Countries: 006 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 268367	A	19880525	EP 87308955	A	19871009	198821	B
CA 1265871	A	19900213				199014	

Priority Applications (No Type Date): CA 523220 A 19861118
Cited Patents: No-SR.Pub
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 268367	A	E	32		

Designated States (Regional): DE FR GB NL SE

Abstract (Basic): EP 268367 A

The natural language system has a syntactic, domain-independent grammar, an abstract **database** navigational language and an algorithum that parses natural language input against the grammar to generate the navigation language. The system includes a lexical analyser for performing synonym substitution from a synonym lexicon prior to parsing the natural language via the algorithum.

The algorithum is implemented in a top down, backtrack fashion which draws upon a syntactic grammar and a domain-independent lexicon and produces **database** operations as an output.

USE/ADVANTAGE - Entity-relationship **database** management system uses augmented phrase structure grammar that retains convenience of semantic grammar.

Title Terms: DOMAIN; INDEPENDENT; NATURAL; LANGUAGE; **DATABASE** ; INTERFACE; TRANSLATION; NAVIGATION; OPERATE; **DATABASE** ; QUERY; VARIABLE; ENFORCE; QUERY; CORRECT
Derwent Class: T01
International Patent Class (Additional): G06F-015/40
File Segment: EPI

23/5/5 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014632562 **Image available**
WPI Acc No: 2002-453266/200248
XRPX Acc No: N02-357392
Heterogeneous database speed-up access method involves converting **source predicate of received** query **into target predicate for second collating sequence using predetermined** conversion rule
Patent Assignee: MICROSOFT CORP (MICT)
Inventor: LARSON G P; ZHANG W
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6381616	B1	20020430	US 99275704	A	19990324	200248	B

Priority Applications (No Type Date): US 99275704 A 19990324
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6381616	B1		25	G06F-012/00	

Abstract (Basic): US 6381616 B1
NOVELTY - The method involves converting the source predicate (e1) of the received query to a target predicate (e2) for the second collating sequence (I2) using a predetermined conversion rule. The target predicate is submitted to the second data source.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also for the following:
(a) a computer readable storage medium;
(b) and a conversion table.
USE - Used for speeding up heterogeneous database access.
ADVANTAGE - Performs efficient processing of database queries about selecting heterogeneous data. Enables to compensate for the differences in collating sequences using predicate conversion. Enables to effectively reduce the amount of data transmitted over the network and reduced communication cost.
DESCRIPTION OF DRAWING(S) - The figure is a schematic diagram of a network which applies speed-access method for heterogeneous database.
Second collating sequence (I2)
Source predicate (e1)
Target predicate (e2)
pp; 25 DwgNo 3/9
Title Terms: HETEROGENEOUS; DATABASE; SPEED; UP; ACCESS; METHOD; CONVERT; SOURCE; RECEIVE; QUERY; TARGET; SECOND; COLLATE; SEQUENCE; PREDETERMINED; CONVERT; RULE
Derwent Class: T01
International Patent Class (Main): G06F-012/00
File Segment: EPI

23/5/6 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014581364 **Image available**
WPI Acc No: 2002-402068/200243
XRPX Acc No: N02-315215
Relational database search method for providing directory service in distributed computing environment, involves combining SQL sub-queries into single query according to set of combination rules
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: CORN C F; FICHTNER L G; MANCISIDOR R A; SHI S
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6356892	B1	20020312	US 98160022	A	19980924	200243	B

Priority Applications (No Type Date): US 98160022 A 19980924
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
US 6356892   B1   13 G06F-017/30

Abstract (Basic): US 6356892 B1
NOVELTY - A light weight directory access protocol (LDAP) filter based query is parsed for element and logic operators of filter query. A SQL sub- **query** is generated for each filter element according to a set of **translation rules** . A set of entry ID is generated for filter **query** relevant to each SQL sub-query. The sub-queries are combined into a single SQL query according to set of combination rules corresponding to logical operators of filter query.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(a) Computer program product in computer readable media for searching a relational database;
(b) Directory service;
(c) Relational database search system
USE - For providing directory service (claimed) in distributed computing environment such as Internet/intranet environment.
ADVANTAGE - The basic LDAP filter expressions are efficiently combined with SQL query to retrieve target entries without any post processing, also the degeneration of sequential search is avoided.
DESCRIPTION OF DRAWING(S) - The figure shows a flowchart for LDAP searching in an LDAP directory service having a relational database management system.
pp; 13 DwgNo 5/6
Title Terms: RELATED; DATABASE; SEARCH; METHOD; DIRECTORY; SERVICE; DISTRIBUTE; COMPUTATION; ENVIRONMENT; COMBINATION; SQL; SUB; QUERY; SINGLE; QUERY; ACCORD; SET; COMBINATION; RULE
Derwent Class: T01
International Patent Class (Main): G06F-017/30
File Segment: EPI

23/5/7 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014483026 **Image available**
WPI Acc No: 2002-303729/200234
Related WPI Acc No: 2001-638800; 2002-122327; 2002-122366; 2002-122371; 2002-122374; 2002-268684; 2002-268699; 2002-268700; 2002-627921
XRPX Acc No: N02-237702
Network security policy translating into policy spec file apparatus; uses several rules for applying to network traffic amongst several communities over several protocol services
Patent Assignee: SECURIFY INC (SECU-N)
Inventor: COOPER G; SHAW R A; SHERLOCK K G; VALENTE L F P
Number of Countries: 091 Number of Patents: 002
Patent Family:
Patent No Kind Date Applicat No Kind Date Week
WO 200199002 A2 20011227 WO 2001US19270 A 20010615 200234 B
AU 200166955 A 20020102 AU 200166955 A 20010615 200234

Priority Applications (No Type Date): US 2001826602 A 20010405; US 2000212126 P 20000616
Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
WO 200199002 A2 E 213 G06F-017/60
Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
AU 200166955 A G06F-017/60 Based on patent WO 200199002

Abstract (Basic): WO 200199002 A2

NOVELTY - A number of policy domains (128) are used in which network traffic is monitored using a number of communities of hosts (100) and a number of rules (105,110) for applying to the network traffic between the number of communities over a number of protocol services. Each of the policy domains is as small as required by traffic monitoring limitations associated with the network traffic that is as large as specification of the number of rules allow

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for

(1) a method for translating desired network security policy into a specification file

(2) a method for using a policy generator to generate a formal policy specification file compatible with a policy monitoring system

(3) an apparatus for generating a formal policy specification file

(4) a method for generating a formal policy specification file

USE - In network security and assessment for generating an initial policy specification file based on gross character characteristics of a network at the IP level, such as policy domains, communities of hosts, sub-nets and fire walls.

ADVANTAGE - Provides the definition of normal traffic on the network, lets end user determine and understand traffic and/or activity on a network, e.g. spots intruder access, and track changes to a network. assists an end user in generating security policy for a network that automatically **converts** a network **policy** into English language representation. Allows an end user to **query** network traffic data for transmitting an event description of network traffic from a source file or data stream to target destination, such as a network policy engine.

DESCRIPTION OF DRAWING(S) - The drawing is a schematic diagram of components of the system according to the invention.

policy domains (128)

hosts (100)

rules (105,110)

pp; 213 DwgNo 1a/32

Title Terms: NETWORK; SECURE; TRANSLATION; FILE; APPARATUS; RULE; APPLY; NETWORK; TRAFFIC; COMMUNAL; PROTOCOL; SERVICE

Derwent Class: T01; W01

International Patent Class (Main): G06F-017/60

File Segment: EPI

23/5/8 **(Item 7 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

013940056 **Image available**

WPI Acc No: 2001-424270/200145

XRPX Acc No: N01-314669

Database query **optimization method for computer system, involves applying optimization** rules **for identified** query **data so that** transformed query **satisfying collection and** conversion **operation is produced**

Patent Assignee: UNIV PENNSYLVANIA (UYPE-N)

Inventor: TANNEN V B

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6240406	B1	20010529	US 98144281	A	19980831	200145	B

Priority Applications (No Type Date): US 98144281 A 19980831

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6240406	B1		10	G06F-017/30	

Abstract (Basic): US 6240406 B1

NOVELTY - The input query for aggregate operations or collection conversion operations, is translated to internal language and the

candidates for optimization are identified from it, so that the identified candidates consist of **translations** of the corresponding operations. A set of optimization **rules** are applied to the identified candidates to form a **transformed query** .

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for computer system.

USE - To manage queries of database e.g. object relational database in computer system (claimed).

ADVANTAGE - Improves efficiency of queries involving aggregate functions and conversion functions and utilizes less resources.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart explaining optimizing compiler.

pp; 10 DwgNo 2/5

Title Terms: DATABASE; QUERY; METHOD; COMPUTER; SYSTEM; APPLY; RULE; IDENTIFY; QUERY; DATA; SO; TRANSFORM; QUERY; SATISFY; COLLECT; CONVERT; OPERATE; PRODUCE

Derwent Class: T01

International Patent Class (Main): G06F-017/30

File Segment: EPI

23/5/9 **(Item 8 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

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[illegible]870 **Image available**

WPI Acc No: 2001-390083/200141

XRPX Acc No: N01-286984

Computer system for commercial transaction using internet, retrieves access rules through interfaces, which are converted into query messages using interface algorithms

Patent Assignee: ART TECHNOLOGY GROUP INC (ARTT-N)

Inventor: BERKOVITZ J; HUNG N; MASON R

Number of Countries: 027 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200142952	A2	20010614	WO 2000US32928	A	20001205	200141	B
AU 200119444	A	20010618	AU 200119444	A	20001205	200161	
EP 1250654	A2	20021023	EP 2000982410	A	20001205	200277	
			WO 2000US32928	A	20001205		
KR 2002075378	A	20021004	KR 2002707386	A	20020610	200313	
JP 2003518664	W	20030610	WO 2000US32928	A	20001205	200339	
			JP 2001544174	A	20001205		
US 6587849	B1	20030701	US 99459224	A	19991210	200345	

Priority Applications (No Type Date): US 99459224 A 19991210

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200142952	A2	E	22	G06F-017/00	
Designated States (National): AU IN JP KR SG					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GR IE IT LU MC NL PT SE TR					
AU 200119444	A			G06F-017/00	Based on patent WO 200142952
EP 1250654	A2	E		G06F-017/00	Based on patent WO 200142952
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR					
KR 2002075378	A			G06F-017/00	
JP 2003518664	W		30	G06F-017/30	Based on patent WO 200142952
US 6587849	B1			G06F-017/30	

Abstract (Basic): WO 200142952 A2

NOVELTY - Several user interfaces are connected to the rule engine through a control center. Independent access rules are retrieved by the **rule** engine from respective interfaces and are **converted** into **query** message using interface algorithms. The message is forwarded to interface and response is received.

DETAILED DESCRIPTION - The control center receives the item descriptor data from the interfaces. An attribute list representing the

data stored corresponding to each interface is produced. An access list is produced based on the attributes. An INDEPENDENT CLAIM is also included for target result set producing method.

USE - For commercial transaction using internet.

ADVANTAGE - Simplifies reusage or modification of rules due to period/environment dependent rules. Facilitates usage of rules in creating web data and e-mail, due to simplified rule structure.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of computer system.

pp; 22 DwgNo 1/4

Title Terms: COMPUTER; SYSTEM; COMMERCIAL; TRANSACTION; RETRIEVAL; ACCESS; RULE; THROUGH; INTERFACE; CONVERT; QUERY; MESSAGE; INTERFACE; ALGORITHM

Derwent Class: T01; T05

International Patent Class (Main): G06F-017/00; G06F-017/30

International Patent Class (Additional): G06F-007/00; G06F-015/00

File Segment: EPI

23/5/10 **(Item 9 from file: 350)**

[illegible]File 350:Derwent WPIX

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013456478 **Image available**

WPI Acc No: 2000-628421/200060

XRPX Acc No: N00-465594

Advanced intelligent network telecommunication system for providing services per trigger to subscriber, has feature interaction manager service logic program which invokes feature service logic programs

Patent Assignee: BELLSOUTH INTELLECTUAL PROPERTY CORP (BELL-N); SCOTT D A (SCOT-I); TUCKER B N (TUCK-I)

Inventor: SCOTT D A; TUCKER B N

Number of Countries: 086 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200062559	A1	20001019	WO 99US28353	A	19991201	200060	B
AU 200018375	A	20001114	AU 200018375	A	19991201	200108	
EP 1088458	A1	20010404	EP 99961884	A	19991201	200120	
			WO 99US28353	A	19991201		
US 6532285	B1	20030311	US 99129116	P	19990414	200321	
			US 99323677	A	19990602		
US 20030108174	A1	20030612	US 99129116	P	19990414	200340	
			US 99323677	A	19990602		
			US 2003347458	A	20030121		

Priority Applications (No Type Date): US 99323677 A 19990602; US 99129116 P 19990414; US 2003347458 A 20030121

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200062559	A1	E	53	H04Q-003/00	
	Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW				
	Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW				
AU 200018375	A			H04Q-003/00	Based on patent WO 200062559
EP 1088458	A1	E		H04Q-003/00	Based on patent WO 200062559
	Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI				
US 6532285	B1			H04M-003/42	Provisional application US 99129116
US 20030108174	A1			H04M-003/42	Provisional application US 99129116
					Cont of application US 99323677
					Cont of patent US 6532285

Abstract (Basic): WO 200062559 A1

NOVELTY - A feature interaction manager service logic program (14), located on a service control point (13), is invoked to subsequently invoke first and second feature service logic programs according to

service interaction **rules** in a database. A service switching point (11) sends a **query** containing **translation** type to the service control point when a trigger (15) prompts.

DETAILED DESCRIPTION - The feature service logic programs are provided on the service control point. The trigger with a translation type is provisioned on a subscriber's telephone line (10) at the service switching point. The service control point includes the database containing service interaction rules for providing multiple services per trigger to a subscriber The telephone line connects the subscriber's telephone to the service switching point. INDEPENDENT CLAIMS are also included for the following:

(a) a method for providing multiple services per trigger to telephone line subscriber;

(b) a service control point for providing multiple services per trigger to telephone line subscriber;

(c) a method for managing feature service logic programs;

(d) and a method for managing multiple services of advanced intelligent network telecommunication system.

USE - For providing multiple services per trigger to subscriber.

ADVANTAGE - Enables customer to subscriber to multiple services simultaneously using a single trigger since a single trigger is made possible to invoke multiple feature service logic programs. Provides telephone line subscribers with greater flexibility for handling incoming calls through different services, including flexible call forwarding, internet call waiting, and privacy director and messaging, without limitation. Also enables subscriber to subsequently update the database to activate or deactivate different services.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic diagram of the advanced intelligent network telecommunication system.

Telephone line (10)
Service switching point (11)
Service control point (13)
Feature interaction manager service logic program (14)
Trigger (15)
pp; 53 DwgNo 1a/6

Title Terms: ADVANCE; INTELLIGENCE; NETWORK; TELECOMMUNICATION; SYSTEM; SERVICE; PER; TRIGGER; SUBSCRIBER; FEATURE; INTERACT; MANAGE; SERVICE; LOGIC; PROGRAM; FEATURE; SERVICE; LOGIC; PROGRAM
Derwent Class: W01
International Patent Class (Main): H04M-003/42; H04Q-003/00
File Segment: EPI

23/5/11 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012374205 **Image available**
WPI Acc No: 1999-180312/199915
Related WPI Acc No: 2001-501834
XRPX Acc No: N99-132465

Rules arranging method for expert system

Patent Assignee: TELERAN TECHNOLOGIES LP (TELE-N)
Inventor: COOPERMAN M; KARCH R
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5875440	A	19990223	US 97848622	A	19970429	199915	B

Priority Applications (No Type Date): US 97848622 A 19970429
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5875440	A		5	G06F-017/30	

Abstract (Basic): US 5875440 A

NOVELTY - When a rule is to be updated to any of the domain in the structure, the domain checks whether the rule fits within the domain or checks whether the query has a specified relationship with one or more

of the domain in the structure. If the database query does not fall within the respective domain, then the rule is not permitted in the hierarchy.

USE - For expert system.

ADVANTAGE - Provides an efficient method for operating on various database **queries** . Modification to the system are limited only to the **rules** within the **changed** domain.

DESCRIPTION OF DRAWING(S) - The figure shows hierarchical arrangement of domains and sub domains.

pp; 5 DwgNo 1/1

Title Terms: RULE; ARRANGE; METHOD; EXPERT; SYSTEM
Derwent Class: T01
International Patent Class (Main): G06F-017/30
International Patent Class (Additional): G06F-015/18
File Segment: EPI

23/5/12 (Item 11 from file: 350)

011625265 **Image available**
WPI Acc No: 1998-042393/199804
XRPX Acc No: N98-033877

Automated method providing database information of enterprise and its policies - by accessing database to find if method is affected by policy change , if so user is given policy choices and makes policy selection from choices, answers query using particular implementation of method based on policy selection

Patent Assignee: ELECTRONIC DATA SYSTEMS CORP (ELDA-N)
Inventor: BERNER A J; ROSENTHAL K A
Number of Countries: 019 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9746952	A1	19971211	WO 97US8535	A	19970520	199804	B
US 5918210	A	19990629	US 96660638	A	19960607	199932	

Priority Applications (No Type Date): US 96660638 A 19960607
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9746952	A1	E	31	G06F-017/30	

Designated States (National): CA
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

US 5918210 A G06F-017/60

Abstract (Basic): WO 9746952 A

The method involves receiving a query about data in the database which calls for the use of a method to answer the query. The database is accessed to determine whether the method is affected by the policy change. Policy choices are provided based on the result of the access.

A policy selection is received from the policy choices. The query is answered using an implementation of the method based on the policy selection. Access is based on the time of interest data. The policies are hypothetical policies of the enterprise.

USE - For modelling business enterprise in database and reporting information from database to extend benefits of object oriented technology to end user.

Dwg.2/3

Title Terms: AUTOMATIC; METHOD; DATABASE; INFORMATION; ACCESS; DATABASE; FINDER; METHOD; AFFECT; CHANGE; SO; USER; CHOICE; SELECT; CHOICE; ANSWER; QUERY; IMPLEMENT; METHOD; BASED; SELECT
Derwent Class: T01
International Patent Class (Main): G06F-017/30; G06F-017/60
File Segment: EPI

23/5/13 (Item 12 from file: 350)

010691640 **Image available**
WPI Acc No: 1996-188596/199619
XRPX Acc No: N96-157693

Interactive programming method for defining expert system - involves defining scenario goal and developing expert rules that relate hierarchically and lead to conclusion related to goal

Patent Assignee: ACTV INC (ACTV-N)
Inventor: FREEMAN M J

Number of Countries: 062 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9609588	A1	19960328	WO 95US12059	A	19950922	199619	B
AU 9536383	A	19960409	AU 9536383	A	19950922	199629	
US 5632007	A	19970520	US 94311019	A	19940923	199726	
EP 782730	A1	19970709	EP 95933897	A	19950922	199732	
			WO 95US12059	A	19950922		
EP 782730	B1	20030618	EP 95933897	A	19950922	200341	
			WO 95US12059	A	19950922		
DE 69531106	E	20030724	DE 631106	A	19950922	200356	
			EP 95933897	A	19950922		
			WO 95US12059	A	19950922		

Priority Applications (No Type Date): US 94311019 A 19940923
Cited Patents: US 4870591; US 5043891; US 5239617
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9609588	A1	E	55	G06F-017/00	
Designated States (National): AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG					
AU 9536383	A			G06F-017/00	Based on patent WO 9609588
US 5632007	A		28	G06F-017/00	
EP 782730	A1	E	55	G06F-017/00	Based on patent WO 9609588
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE					
EP 782730	B1	E		G06F-017/00	Based on patent WO 9609588
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE					
DE 69531106	E			G06F-017/00	Based on patent EP 782730 Based on patent WO 9609588

Abstract (Basic): WO 9609588 A

The method involves allowing users at an interactive terminal to respond to multi-choice questions in order to achieve a conclusion. The terminal has multiple streams of audio, video, graphics or other data either on a storage device or from a reception channel.

Initially the goals are defined (10) and human knowledge obtained (11) to achieve the goals. A hierarchical rule base is defined (12). If a **rule** requires input from a user a **query** is **translated** (13) and the whole is translated into a tree diagram (14). This is mapped into data streams (15) which are then stored on a medium or made available at reception channels.

ADVANTAGE - Allows complex interactive systems to be programmed to give meaningful interactions with the user.

Dwg.2/8

Title Terms: INTERACT; PROGRAM; METHOD; DEFINE; EXPERT; SYSTEM; DEFINE; GOAL; DEVELOP; EXPERT; RULE; RELATED; HIERARCHY; LEAD; CONCLUDE; RELATED; GOAL
Derwent Class: T01; W01; W02
International Patent Class (Main): G06F-017/00
File Segment: EPI

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File   8:Ei Compendex(R) 1970-2004/Feb W2
         (c) 2004 Elsevier Eng.  Info. Inc.
File  35:Dissertation Abs Online 1861-2004/Jan
         (c) 2004 ProQuest Info&Learning
File 202:Info. Sci. & Tech. Abs. 1966-2004/Jan 20
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File  65:Inside Conferences 1993-2004/Feb W3
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         (c) 2004 Institution of Electrical Engineers
File  94:JICST-EPlus 1985-2004/Feb W2
         (c)2004 Japan Science and Tech Corp(JST)
File 483:Newspaper Abs Daily 1986-2004/Feb 17
         (c) 2004 ProQuest Info&Learning
File   6:NTIS 1964-2004/Feb W3
         (c) 2004 NTIS, Intl Cpyrght All Rights Res
File 144:Pascal 1973-2004/Feb W2
         (c) 2004 INIST/CNRS
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  34:SciSearch(R) Cited Ref Sci 1990-2004/Feb W2
         (c) 2004 Inst for Sci Info
File  99:Wilson Appl. Sci & Tech Abs 1983-2004/Jan
         (c) 2004 The HW Wilson Co.
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group
File 266:FEDRIP 2004/Dec
         Comp & dist by NTIS, Intl Copyright All Rights Res
File  95:TEME-Technology & Management 1989-2004/Feb W1
         (c) 2004 FIZ TECHNIK
File 438:Library Lit. & Info. Science 1984-2004/Jan
         (c) 2004 The HW Wilson Co

Set       Items   Description
S1       716670   DATABASE? ? OR DATA()BASE? ? OR REPOSITOR??? OR INFORMATIO-
              N()MANAGEMENT()SYSTEM? ?
S2        95078   QUERY OR QUERIES OR SEARCH(1W)(EXPRESSION? ? OR STATEMENT?
              ? OR PHRASE? ? OR STRING? ? OR PARAMETER? ? OR PLAN OR PLANS -
              OR STRUCTURE? ?)
S3        13658   S2(5N)(STRUCTURE OR CONSTRUCTION OR ARRANGEMENT OR ORGANIZ-
              ATION OR ORGANISATION OR FORMATION OR COMPOSITION OR CONFIGUR-
              ATION OR SEMANTIC? ? OR TEMPLATE? ? OR MODEL? ? OR SYNTACTIC -
              OR SYNTAX OR DESCRIPTOR? ? OR METADATA)
S4         1224   S3(5N)(REFER??? OR REFERENC??? OR MAP???? OR CORRELAT? OR -
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              HIP? ?)
S5      4795801   COLUMN? ? OR FIELD? ?
S6       217735   S5(5N)(REFER??? OR REFERENC??? OR MAP???? OR CORRELAT? OR -
              CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELAT??? OR RELATIONS-
              HIP? ?)
S7         1475   (GENERIC OR STANDARD OR GENERAL)(3W)S2
S8           60   S7(5N)(REFER??? OR REFERENC??? OR MAP???? OR CORRELAT? OR -
              CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELAT??? OR RELATIONS-
              HIP? ?)
S9           45   S1 AND S8
S10          30   RD (unique items)
S11          26   S10 NOT PY=2001:2004
S12         769   S1 AND S4
S13          29   S5 AND S12
S14          19   RD (unique items)
S15          10   S14 NOT PY=2001:2004
S16         269   AU=(HEUER J? OR HEUER, J?)
S17           0   S1 AND S3 AND S16
```

11/5/4 (Item 4 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

03305729 E.I. Monthly No: EIM9109-047011
Title: Towards a visual query language for an object oriented geographical information system.
Author: Jungert, Erland
Corporate Source: Swedish Defence Res Establ, Linkoping, Sweden
Conference Title: Proceedings of the 1990 IEEE Workshop on Visual Languages
Conference Location: Skokie, IL, USA Conference Date: 19901004
Sponsor: IEEE Computer Soc; Univ of Pittsburgh; Knowledge Systems Inst; VL Foundation
E.I. Conference No.: 14991
Source: Proc 90 IEEE Workshop Visual Lang. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA (IEEE cat n 90TH0330-1). p 132-137
Publication Year: 1990
ISBN: 0-8186-2090-0
Language: English
Document Type: PA; (Conference Paper) Treatment: X; (Experimental)
Journal Announcement: 9109
Abstract: A query language designed for a geographical information system is described and discussed. The basic map data structure is object-oriented, homogeneous, and raster-based. Because of the homogeneous map data structure, queries can be applied in a more or less **generic** way; that is, **queries** can be applied to all **map** data structures regardless of their type. The query language design is based on a visual interaction technique that gives a simpler structure compared to conventional query languages. The various types of queries are discussed. 11 Refs.
Descriptors: **DATABASE** SYSTEMS--*Query Languages; MAPS AND MAPPING
Identifiers: GRAQULA QUERY LANGUAGE; GEOGRAPHIC INFORMATION SYSTEMS; OBJECT ORIENTED **DATABASES** ; VISUAL QUERY LANGUAGES; MAP DATA STRUCTURES
Classification Codes:
723 (Computer Software); 405 (Construction Equipment & Methods)
72 (COMPUTERS & DATA PROCESSING); 40 (CIVIL ENGINEERING)

11/5/9 (Item 3 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

01709978 ORDER NO: AADAA-INQ42810
Attribute cardinality maps: New query result size estimation techniques for database **systems**
Author: Thiyagarajah, Murali
Degree: Ph.D.
Year: 1999
Corporate Source/Institution: Carleton University (Canada) (0040)
Adviser: B. John Oommen
Source: VOLUME 60/09-B OF DISSERTATION ABSTRACTS INTERNATIONAL. PAGE 4717. 260 PAGES
Descriptors: COMPUTER SCIENCE
Descriptor Codes: 0984
ISBN: 0-612-42810-9

Current **database** systems utilize histograms to approximate the frequency distributions of attribute values. These are used to efficiently estimate query result sizes and access plan costs. Even though they have been in use for nearly two decades, there has been no significant mathematical techniques (other than those used in statistics for traditional histogram approximations) to study them.

The major contributions of this thesis are the two novel histogram-like query result-size estimation techniques, namely, the Rectangular Attribute Cardinality Map (R-ACM) and the Trapezoidal Attribute Cardinality Map (T-ACM), that aim to approximate the density of the underlying attribute values using the philosophies of numerical integration. By deriving the probability density function within the

sectors of these structures and proving that the frequencies of the attribute values within the sectors are Binomially distributed, we provide a fairly extensive mathematical analysis for their variances, and the average and worst case errors for result size estimations. This enables us to make a fair comparison with the current state-of-the-art estimation methods, and to prove the superiority of our new techniques. We verify our theoretical results using an extensive set of experiments, including both synthetic and real-world data, and the Transaction Processing Performance Council's TPC-D benchmarking environment.

Finally we investigate a few strategies to improve the estimation accuracy of the ACMs by finding appropriate build-parameters. In the case of the R-ACM, estimation accuracy can be arbitrarily increased by reducing the tolerance value, τ. But this is, of course, limited by the available storage space. As opposed to this, for a given storage space, the accuracy of the T-ACM can be improved by finding the suitable slope for the trapezoidal sectors, and thus we devote some attention to determining the suitable slopes. We anticipate that due to their high accuracy and low construction costs, the attribute cardinality **maps** could prove to be **standard** tools for **query** optimization in future **database** systems.

01632283 ORDER NO: AAD98-24544

CONTEXT-BASED SIMILARITY RETRIEVAL AND INDEXING IN LARGE IMAGE DATABASES

Author: EL-KWAE, ESSAM ABDEL-AZIM
Degree: PH.D.
Year: 1997
Corporate Source/Institution: UNIVERSITY OF MIAMI (0125)
Supervisor: MANSUR R. KABUKA
Source: VOLUME 59/02-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 725. 187 PAGES
Descriptors: COMPUTER SCIENCE
Descriptor Codes: 0984

A framework for retrieving images by spatial similarity (FRISS) in image **databases** is presented. In this framework, a robust retrieval by spatial similarity (RSS) algorithm is defined as one that recognizes both directional and topological spatial constraints and is able to recognize images even after they undergo translation, scaling, rotation or any arbitrary combination of transformations. An algorithm, $SIM\sb{DTC},$ that satisfies the FRISS specifications is presented. $SIM\sb{DTC}$ introduces the concept of a Rotation Correction Angle (RCA) to align objects in one image spatially closer to matching objects in another image for more accurate similarity assessment. The algorithm was tested using the TESSA image **database** , an intuition test, and using synthetic images. Analysis shows the robustness of the $SIM\sb{DTC}$ algorithm over current algorithms.

To maintain consistency of object names throughout the **database** , a compact logical shape representation called the Hilbert Morphological Skeleton Transform (HMST) is introduced. The HMST preserves the skeleton properties including information preservation and progressive visualization. An object recognition algorithm, the Hilbert Skeleton Matching Algorithm (HSMA), which renders object similarity as a distance measure is introduced. Results show that the HSMA algorithm achieves a comparable object recognition rate while substantially reducing the complexity of current skeleton matching algorithm.

To avoid exhaustive search in large image **databases** , a multilevel signature file called the Two Signature Multi-Level Signature File (2SMLSF) is introduced. Two types of signatures are generated, one is stored in the leaf of the signature tree and is based on the included domain objects and their spatial relationships. The other is used in the rest of the levels and is based only on the domain objects included in the image. Analytical comparison of the 2SMLSF is given compared to the Two Level Signature File both for storage requirements and search performance. The 2SMLSF significantly reduces the storage requirements. In addition, more **general**

queries involving object existence, spatial **relationships** , and image variants can be answered using this index structure. Performance of the 2SMLSF indexing method, in most cases, significantly improves over current signature file techniques. A signature generation method independent of object translation, scaling, or rotation is introduced.

11/5/15 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC
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5644984 INSPEC Abstract Number: C9709-4250-006
Title: Similarity-based queries for time series data
Author(s): Rafiei, D.; Mendelzon, A.
Journal: SIGMOD Record Conference Title: SIGMOD Rec. (USA) vol.26, no. p.13-25
Publisher: ACM,
Publication Date: June 1997 Country of Publication: USA
CODEN: SRECD8 ISSN: 0163-5808
SICI: 0163-5808(199706)26:2L.13:SBQT;1-1
Material Identity Number: A660-97002
Conference Title: SIGMOD 1997. ACM SIGMOD International Conference on Management of Data
Conference Sponsor: ACM
Conference Date: 13-15 May 1997 Conference Location: Tucson, AZ, USA
Language: English Document Type: Conference Paper (PA); Journal Paper (JP)
Treatment: Theoretical (T)
Abstract: We study a set of linear transformations on the Fourier series representation of a sequence that can be used as the basis for similarity queries on time-series data. We show that our set of transformations is rich enough to formulate operations such as moving average and time warping. We present a query processing algorithm that uses the underlying R-tree index of a multidimensional data set to answer similarity queries efficiently. Our experiments show that the performance of this algorithm is competitive to that of processing ordinary (exact match) queries using the index, and much faster than sequential scanning. We **relate** our transformations to the **general** framework for similarity **queries** of (Jagadish et al., 1995). (16 Refs)
Subfile: C
Descriptors: **database** theory; discrete Fourier transforms; Fourier series; moving average processes; query processing; software performance evaluation; statistical **databases** ; time series; tree data structures
Identifiers: similarity-based queries; time series data; linear transformations; Fourier series representation; sequence; moving average; time warping; query processing algorithm; R-tree index; multidimensional data set; algorithm performance; sequential scanning; statistical **database** ; discrete Fourier transform
Class Codes: C4250 (Database theory); C6160Z (Other DBMS); C7310 (Mathematics computing); C1140 (Probability and statistics)

11/5/17 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC
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5348613 INSPEC Abstract Number: C9610-6160K-003
Title: Generating data integration mediators that use materialization
Author(s): Gang Zhou; Hull, R.; King, R.
Author Affiliation: Dept. of Comput. Sci., Colorado Univ., Boulder, CO, USA
Journal: Journal of Intelligent Information Systems: Integrating Artificial Intelligence and Database Technologies vol.6, no.2-3 p. 199-221
Publisher: Kluwer Academic Publishers,
Publication Date: June 1996 Country of Publication: Netherlands
CODEN: JIISEH ISSN: 0925-9902

SICI: 0925-9902(199606)6:2/3L.199:GDIM;1-R
Material Identity Number: C318-96002
U.S. Copyright Clearance Center Code: 0925-9902/96/$8.50
Language: English Document Type: Journal Paper (JP)
Treatment: Theoretical (T)
Abstract: The paper presents a framework for data integration that is based on using "Squirrel integration mediators" that use materialization to support integrated views over multiple **databases** . These mediators generalize techniques from active **databases** to provide incremental propagation of updates to the materialized views. A framework based on "view decomposition plans" for optimizing the support of materialized integrated views is introduced. The paper describes the Squirrel mediator generator currently under development, which can generate the mediators based on high-level specifications. The integration of information by Squirrel mediators is expressed primarily through an extended version of a **standard query** language, that can **refer** to data from multiple information sources. In addition to materializing an integrated view of data, these mediators can monitor conditions that span multiple sources. The Squirrel framework also provides efficient support for the problem of "object matching", that is, determining when object representations (e.g., OIDs) in different **databases** correspond to the same object-in-the-world, even if a universal key is not available. To establish a context for the research, the paper presents a taxonomy that surveys a broad variety of approaches to supporting and maintaining integrated views. (29 Refs)
Subfile: C
Descriptors: active **databases** ; distributed **databases** ; query processing; SQL
Identifiers: data integration mediators; materialization; Squirrel integration mediators; integrated views; multiple **databases** ; active **databases** ; incremental update propagation; materialized views; view decomposition plans; high-level specifications; standard query language; multiple information sources; object matching; object representations
Class Codes: C6160K (Deductive databases); C6160B (Distributed databases) ; C6140D (High level languages)

11/5/20 (Item 7 from file: 2)
DIALOG(R)File 2:INSPEC

4429226 INSPEC Abstract Number: C9308-7250-001
Title: Refinement of enquiries in retrieval systems based on the universal relation model
Author(s): Leymann, F.
Author Affiliation: IBM Deutschland GmbH, German Application Dev. Lab., Boblingen, Germany
Journal: Information Systems vol.18, no.2 p.129-39
Publication Date: March 1993 Country of Publication: UK
CODEN: INSYD6 ISSN: 0306-4379
U.S. Copyright Clearance Center Code: 0306-4379/93/$6.00+0.00
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P); Theoretical (T)
Abstract: Presents the achievable simplifications when document retrieval systems will be based on the universal relation model. When the search condition of a query is too fuzzy, the cardinality of the answer set may become very large. Some retrieval systems thus provide the capability of 'refining' answer sets; this allows referring to an existing answer set when issuing an additional query to reduce the number of qualifying tuples. There are two different methods to refine a given answer set: one method produces a new query based on the predicates of both queries, the other method creates an intermediate answer set based on the new query and provides the refined answer set via suitable set manipulations. The results are in **general** different. Focusing on **queries** on universal **relation** systems, the paper describes the problem in more detail and provides criteria under which the methods produce the same result. (21 Refs)
Subfile: C
Descriptors: **database** theory; information retrieval systems; relational

algebra; relational **databases**
Identifiers: universal relation model; document retrieval systems; search condition; answer set; qualifying tuples
Class Codes: C7250 (Information storage and retrieval); C4250 (Database theory); C6160D (Relational DBMS)

11/5/21 (Item 8 from file: 2)
DIALOG(R)File 2:INSPEC
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01537163 INSPEC Abstract Number: C80021774
Title: Query processing in a distributed data base
Author(s): Baldissera, C.; Bracchi, G.; Ceri, S.
Author Affiliation: Istituto di Elettrotecnica ed Elettronica, Politecnico di Milano, Milan, Italy
Conference Title: AICA '79 Conference Part I p.225-36
Publisher: Associazione Italiana Calcolo Automatico, Bari, Italy
Publication Date: 1979 Country of Publication: Italy 317 pp.
Conference Date: 10-13 Oct. 1979 Conference Location: Bari, Italy
Language: Italian Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: Deals with data retrieval strategies in a Distributed **Data Base** (DDB). **General** problems **related** to **query** processing are treated first; the impact on data retrieval of the overall architecture of the DDB, of the data distribution criteria and the characteristics of the data dictionary are analyzed. The specific problem of query processing optimization is then discussed in depth, assuming a general computer network topology and a replicated **database** ; various optimization approaches are presented and compared. The specific features of an algorithm developed by the authors for query processing optimization are finally described. (19 Refs)
Subfile: C
Descriptors: **database** management systems
Identifiers: distributed **data base** ; data retrieval strategies; query processing; data dictionary
Class Codes: C6160B (Distributed DBMS)

11/5/22 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS
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1231319 NTIS Accession Number: AD-A164 265/1
Formalization of the Program Reference Language
Final rept. 15 Jul 84-14 Sep 85)
Brixen, W. M. ; Rosenbaum, S. G. ; Brzustowicz, M. A. ; Dean, J. S. ; McCune, B. P.
Advanced Information and Decision Systems, Mountain View, CA.
Corp. Source Codes: 073626000; 395130
Sponsor: Air Force Office of Scientific Research, Bolling AFB, DC.
Report No.: AI/DS-TR-1066-01; AFOSR-TR-85-1219
8 Oct 85 84p
Languages: English
Journal Announcement: GRAI8611
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A05/MF A01
Country of Publication: United States
Contract No.: F49620-84-C-0075; 2304; A2
The goal of the Program Reference Language (PRL) Project is to construct a representation of Ada programs that facilitates retrieval of code based on both syntactic (literal) and semantic (functional) queries. The fourth year of the project focused on the formalization of the Extended Program Model (EPM), which consists of textual, syntactic, and semantic representations. The PRL query language specifies search over these three

interrelated **databases** . Textual items are retrieved by string- **matching** capabilities of **standard** editors; syntactic **queries** are directd to the syntax parse tree; queries referencing program functionality are mapped onto the LOSP semantic representation. Key words: Program Reference Language (PRL), Extended Program Model (EPM), Intelligent Program Editor (IPE), Artificial Intelligence (AI), Program editing, Ada editor, Ada syntax, Semantic model, Pictorial logic, Query language, and LOSP.
Descriptors: High level languages; *Artificial intelligence; Interrogation; Coding; **Data bases** ; Editing; Information retrieval; Interactions; Syntax; Semantics
Identifiers: *Ada programming language; *Query languages; PRL programming language; NTISDODXA; NTISDODAF
Section Headings: 62B (Computers, Control, and Information Theory--Computer Software)

11/5/23 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal

14273391 PASCAL No.: 99-0477878
Towards a language for the fully generic queries
DBPL-6 : database **programming languages : Estes Park CO, 18-20 August 1997**
BEERI C; MILO T; TA-SHMA P
CLUET Sophie, ed; HULL Rick, ed
Institute of Computer Science, Hebrew University, Jerusalem, 91904, Israel; Department of Computer Science, Tel-Aviv University, Tel-Aviv, Israel
Database programming languages. International workshop, 6 (Estes Park CO USA) 1997-08-18
Journal: Lecture notes in computer science, 1998, 1369 239-259
ISBN: 3-540-64823-2 ISSN: 0302-9743 Availability: INIST-16343; 354000076409400140
No. of Refs.: 13 ref.
Document Type: P (Serial); C (Conference Proceedings) ; A (Analytic)
Country of Publication: Germany; United States
Language: English

English Descriptors: Query language; Canonical form; **Generic relation** ; **Database** ; **Query**
French Descriptors: Langage interrogation; Forme canonique; **Relation** generique; Base donnee; **Generic query** ; Requete

Classification Codes: 001D02B07D

11/5/25 (Item 2 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

02645144 Genuine Article#: LT185 Number of References: 47
Title: **EXPERIMENTAL SYSTEM FOR SIMILARITY AND 3D SEARCHING OF CAS REGISTRY SUBSTANCES .1. 3D SUBSTRUCTURE SEARCHING**
Author(s): FISANICK W; CROSS KP; FORMAN JC; RUSINKO A
Corporate Source: CHEM ABSTRACTS SERV INC,2540 OLENTANGY RIVER RD,POB 3012/COLUMBUS//OH/43210
Journal: JOURNAL OF CHEMICAL INFORMATION AND COMPUTER SCIENCES, 1993, V33, N4 (JUL-AUG), P548-559
ISSN: 0095-2338
Language: ENGLISH Document Type: ARTICLE
Geographic Location: USA
Subfile: SciSearch; CC PHYS--Current Contents, Physical, Chemical & Earth Sciences
Journal Subject Category: COMPUTER APPLICATIONS & CYBERNETICS; CHEMISTRY

Abstract: Chemical Abstracts Service (CAS) is developing an experimental system for similarity and 3D searching on CAS Registry substances. The purpose of this system is to obtain user input on desirable capabilities and data content for such searching. Currently, the system supports 3D exact, substructure, and superstructure searching. The 3D coordinates for the system's **databases** were generated via the CONCORD program. These **databases** include a CAS 3D structure templates (CAST-3D) subset of over 365 000 substances with limited conformational flexibility. The experimental system utilizes a client-server architecture using client workstations for query framing and display and a single search engine compute server. Search levels include a screen step followed by atom-by-atom search (using a modified Ullman subgraph isomorphism algorithm), and, where appropriate, a geometric superimposition of the query and answer file substance. Two logical 3D substructure query types are supported: a **general query**, typically used for pharmacophore pattern **matching**, and a framework query, typically used in locating synthetic precursors that lead to a desired geometric orientation of substituents. Novel screens based on atom triangle and tetrangle distances as well as global and localized flexibility indices provide for effective and efficient screening. Also, user parameters can specify approximate local and global conformational flexibility characteristics for the matching file substances. This paper describes the features and capabilities that are currently available in the experimental system along with an illustrative application scenario.

Identifiers--KeyWords Plus: CHEMICAL-ABSTRACTS-SERVICE; 3-DIMENSIONAL MOLECULAR-STRUCTURES; CARBONIC-ANHYDRASE INHIBITORS; MARKUSH STRUCTURE STORAGE; RETRIEVAL CAPABILITY; FILES; SCREENS; SUPERPOSITION; SELECTION; ALGORITHM

Research Fronts: 91-1668 001 (TOPICALLY ACTIVE CARBONIC-ANHYDRASE INHIBITORS; METAL-HALOGEN EXCHANGE INITIATED INTRAMOLECULAR ACYLATION; UNEXPECTED PH-DEPENDENT CONFORMATION OF HIS-64)

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11/5/26 (Item 1 from file: 95)

E96011690258

Containment of conjunctive queries: Beyond relations as sets
(Konjunktive Abfragen ueber Relationsdatenbanken: ein verallgemeinerter Datenbankbegriff mit assoziierendem Label fuer jedes Tupel)
Ioannidis, YE; Ramakrishnan, R
Univ. of Wisconson, Madison, USA
ACM Transactions on Database Systems, New York, v20, n3, pp288-324, 1995
Document type: journal article Language: English
Record type: Abstract
ISSN: 0362-5915

ABSTRACT:
Conjunctive queries are queries over a relational **database** and are at the core of relational query languages such as SQL. Testing for containment (and equivalence) of such queries arises as part of many advanced features of query optimization, for example, using materialized views, processing correlated nested queries, semantic query optimization, and global query optimization. Earlier formal work on the topic has examined conjunctive queries over sets of tuples, where each query can be viewed as a function from sets to sets. Containment (and equivalence) of conjunctive queries has been naturally defined based on set inclusion and has been shown to be an NP-complete problem. Even in SQL, however, queries over multisets of tuples may be posed. In fact, relations are treated as multisets by default, with duplicates being eliminated only after explicit requests. Thus, in order to reason about containment/equivalence of a large class of SQL queries, it is necessary to consider a generalization of conjunctive queries, in which relations are interpreted as multisets of tuples: The view of a relation as a set of tuples must be generalized. In this paper conjunctive queries over **databases** in which each tuple has an associated label are studied. This generalized notion of a **database** allows to consider relations that are multisets and relations that are fuzzy sets. As a special case, it can also models traditional set-relations by making the label associated with a tuple be either 'true' (meaning that the tuple is in the relation) or 'false' (meaning that the tuple is not in the relation). In order to keep the results general, a variety of label systems, where each label system is essentially a set of conditions on the labels that can be associated with tuples is considered. Once a result is established for a label system, it holds for all interpretations of relations that satisfy these conditions.

15/5/2 (Item 2 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

03606586 E.I. Monthly No: EIM9305-028077
Title: Visual strategies for querying databases .
Author: Batini, C.; Catarci, T.; Costabile, M. F.; Levialdi, S.
Corporate Source: Universita di Roma ?La Sapienza', Roma, Italy
Conference Title: Proceedings 1991 IEEE Workshop on Visual Languages
Conference Location: Kobe, Jpn Conference Date: 19911008
E.I. Conference No.: 17750
Source: Proc 91 IEEE Workshop Visual Lang. Publ by IEEE, Computer Society, Los Alamitos, CA, USA (IEEE cat n 91TH0402-8). p 183-189
Publication Year: 1991
ISBN: 0-8186-2330-6
Language: English
Document Type: PA; (Conference Paper) Treatment: A; (Applications); G; (General Review)
Journal Announcement: 9305
Abstract: A number of interfaces, based on different techniques which better exploit the human senses, have been recently suggested and implemented so enlarging the bandwith of the man-machine communication channel. The availability of graphical devices at low cost has given rise to a large diffusion of visual interfaces. The **database field** is particularly suited for such interfaces mainly because the **database** is often queried by a casual user, who may not be conversant with conventional query languages. The use of a visual tool may therefore help to access the **database** , without the dependency on the native language and the limitations imposed by the specific application area. In this paper we concentrate on the querying strategies developed in existing visual query systems (VQS) by defining a suitable taxonomy and analyzing how these systems can be compared against such a taxonomy. (Author abstract) 39 Refs.
Descriptors: QUERY LANGUAGES; USER INTERFACES; COMPUTER GRAPHICS; **DATABASE** SYSTEMS; COMMUNICATION CHANNELS (INFORMATION THEORY); SENSORY PERCEPTION; MAN MACHINE SYSTEMS
Identifiers: MAN MACHINE COMMUNICATION CHANNELS; VISUAL **QUERY** SYSTEMS; ENTITY **RELATIONSHIP MODELS** ; NATIVE LANGUAGES
Classification Codes:
723 (Computer Software); 716 (Radar, Radio & TV Electronic Equipment); 461 (Biotechnology)
72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS); 46 (BIOENGINEERING)

15/5/4 (Item 4 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

01723353 E.I. Monthly No: EI8501001978 E.I. Yearly No: EI85029113
Title: QUERIES ON A HIERARCHICAL DATA STRUCTURE.
Author: Larner, A.
Source: IBM Technical Disclosure Bulletin v 27 n 5 Oct 1984 p 3142-3149
Publication Year: 1984
CODEN: IBMTAA ISSN: 0018-8689
Language: ENGLISH
Document Type: JA; (Journal Article) Treatment: A; (Applications)
Journal Announcement: 8501
Abstract: The system disclosed allows a user to express, modify and extend a query on hierarchically structured data. The user, having gained an understanding of the reference of segments in a hierarchy, and knowing what his query is about at its lowest (detail) level, specifies the segments, or **fields** in those segments, pertaining to that lowest level. This constitutes his specification of segments which functionally determine the path of the query (determinant segments). Inbuilt rules about instance identity of segments and levels of accumulation of **fields** within segments, along with this identification of determinant segments, resolve ambiguities between queries defined using the same derivation of data in their results, and so save the user from complex specification of the

structure of his **query** in **relation** to its **data bases** . A useful and natural default formatting of query results is automatically generated. Accumulation of data at various levels is allowed by a slight modification of the relevant inbuilt rule and is made applicable to averages by a redefinition of that function. The user is allowed to treat certain segments as extensions of others, where this is appropriate. This avoids forcing accumulation of uniquely identifiable **fields** and allows the production of default values at the user's option.

Descriptors: *DATA PROCESSING--*Data Structures
Identifiers: QUERIES; HIERARCHICAL DATA STRUCTURE
Classification Codes:
723 (Computer Software)
72 (COMPUTERS & DATA PROCESSING)

15/5/5 **(Item 1 from file: 35)**
DIALOG(R)File 35:Dissertation Abs Online
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01807374 ORDER NO: AADAA-I9939368
Semantic content-based access to hypervideo databases
Author: Jiang, Haitao
Degree: Ph.D.
Year: 1998
Corporate Source/Institution: Purdue University (0183)
Major Professor: Ahmed K. Elmagarmid
Source: VOLUME 60/07-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 3369. 120 PAGES
Descriptors: COMPUTER SCIENCE
Descriptor Codes: 0984
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Technological advances have spurred the use of digital video and generated vast amount of video **repositories** . The unique characteristics of digital video pose great research challenges to video data management for efficient and effective user access. Recent years have seen increasing research activities in the **field** of video **databases** . However, current efforts, especially those on video data modelling, have some of the following shortcomings: (1) they often focus on the visual content and therefore lack modeling of semantic content and spatio-temporal characteristics; (2) the semantic association among video data is not captured; (3) they often depend on relational **database** schema with fixed sets of attributes and lack generality and flexibility; (4) video objects usually are not fully represented. Due to the weaknesses of video data **models** , the **corresponding query** languages are also limited. These factors make user access to video **database** less than optimal.

The goal of this work to provide a practical solution for efficient and effective semantic content-based user access to video **databases** . A novel video data model called Logical Hypervideo Data Model (LHVDM) is proposed. The model is based on a video abstraction hierarchy and semantic content descriptions. The multi-level data abstractions provide data independence, multi-user view sharing, and data reuse. We define the concept and representation of hot video objects, which is an integrated part of the LHVDM model. Semantic associations among different logical video entities such as hot video objects are captured by video hyperlinks. Based on LHVDM, we further present a video query language that allows users to query and retrieve video based on content descriptions with spatial and temporal constraints. The LHVDM model also supports a user definable and adaptive way of browsing the video **database** . Video data browsing is done not only on the visual information through progressive multi-level video wrapper but also on the semantic content through user-adaptive video hyperlinks. Finally, a web-based distributed video **database** prototype is built to demonstrate the soundness of the proposed approach. Several implementation techniques such as lazy delivery, distributed sub-query caching, and user profiling are presented.

15/5/6 (Item 2 from file: 35)
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1069853 ORDER NO: AAD89-17997
THE EFFECT OF DENORMALIZED SCHEMAS ON AD-HOC QUERY FORMULATION: A HUMAN FACTORS EXPERIMENT IN DATABASE **DESIGN**
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The information systems literature is rich with studies of **database** organization and its impact on machine, programmer, and administrative efficiency. Little attention, however, has been paid to the impact of **database** organization on end-user interactions with computer systems. This research effort addressed this increasingly important issue by examining the effects of **database** organization on the ability of end-users to locate and extract desired information.

The study examined the impact of normalization levels of external relational **database** schema on end-user query success. It has been suggested in the literature that end-user query success might be improved by presenting external schema in lower level normal forms. This speculation is based on an analytical study of one particular class of query, queries involving join operations. The research presented here provides empirical support for this assertion. However, the implicit assumption that all other queries are neutral in their bias toward a particular level of normalization was found to be false. A class of queries requiring decomposition of prejoined relations was identified which strongly biases normalized relations. Thus, no particular normalization level was shown to dominate unless assumptions were made as to the class of query being formulated. Evidence from **field** research may be required to completely resolve the issue.

The study also examined the interaction effects between normalization levels and other key variables known to impact query success. Significant interactions with user skill and the complexity of the query being made were found. The level of normalization did not impact high skilled users making easy queries or low skilled users making difficult queries. The impact of these interactions, as well as the main effects of the **related** variables, on **query syntax** and logic errors holds important implications for **database** administrators as well as those involved with the development of **database** query languages.

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INTERPRETATION OF NATURAL LANGUAGE DATABASE **QUERIES USING OPTIMIZATION METHODS (LINGUISTICS)**
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The automatic interpretation of natural language (in this work, English), **database** questions formulated by a user untrained in the

technical aspects of **database** querying is an established problem in the **field** of artificial intelligence. State-of-the-art approaches involve the analysis of queries with syntactic and semantic grammars expressed in phrase structure grammar or transition network formalisms. With such methods difficulties exist with the detection and resolution of ambiguity, with the mis-interpretation possibilities inherent with finite length look-ahead, and with the modification and extension of a mechanism for other sources of semantic knowledge. This work examines the potential of optimization techniques to solve these problems and interpret natural language, **database** queries.

The proposed method involves developing a 0-1 integer programming problem for each query. The possible values that the set of variables in the optimization may take on is an enumeration of possible such individual associations between the **database** schema and the query. The solution to the integer programming problem corresponds to a single assignment of **database** data items and **relationships** to the words in the **query** . Constraints are derived from **syntactic** and **database** schema knowledge stored as libraries of templates. An objective function is used to rank the possible associations as to their likelihood of agreement with the intent of the questioner.

A test mechanism was built to support evaluation of the proposed method. Suitable knowledge source template sets and an objective function were developed experimentally with the test mechanism from a learning sample of queries. Then the performance of the method was compared to that of an established system (PLANES) on a test set of queries. The performance of the new method was found to be comparable to that of the established system.